7: Stuzler-Raemaekers T-3 (1950-51) 1953 MM2 Hadhramaut MM2

133 a second miracle happens. There is a cleft in the great basalt plateau and
311 a beautiful green valley opens abruptly in the flat tableland—a valley running from east to west, joining the sea some 150 miles further on. This is a fertile valley with gardens and palm groves, millet fields and white palaces. An underground river continually provides water for the wells and the little irrigation channels. There are crops up to three times per year. In this lovely setting very civilized and well-dressed townsfolk live in large mud-built towns on the valley cliff sides. Recently they have laid aside their arms and ceased their blood feuds and tribal wars which raged from town to town, from tribe to tribe, from family to family. With the aid of the British adviser they have established law and order and made their foreign trade, which is their livelihood, flourish unhindered.

172 When we go back into history to find out where this miracle has sprung
341 from, we discover that there were the old Sabean and Hymyaritic civilizations of 1,000 or 2,000 years B.C., of which Mr. Ingrams spoke. Perhaps it started with the Minean Empire, on the eastern border of Yemen, and its capital, Ma'in. Later came the Sabeans with their capital a little south, at Marib; followed by the Katabaneans, whose centre, Timna, was at the south-eastern corner of the great desert. And lastly, perhaps, the Hadhramis, whose early capital may have been the much disputed Shabwa. These people built in stone, and their buildings were several storeys high and of very fine dry masonry. Many are the ruins covering the western territory between Aden and Hadhramaut and to the north in Yemen. But also in Hadhramaut itself, further east, there are vestiges of towns and temples, in the main valley and the side valleys; great plans of garrison cities, and remains of castle and palace walls in beautifully executed stonework, all erected perhaps some 2,000 years ago.

341 With such a tradition it is not surprising that something is still found
333 in the present day, and although the Hadhramis have not continued the stone masonry and have turned mainly to sun-dried mud bricks, their achievements are of remarkable interest.

101 Reviewing the various groups of the population, there are the bedouin
342 who still live by camel transport, the sand bedouin of the desert who live in simple black camelhair tents, and the bedouin mountain tribesmen who live on the arid plateaux. The latter are rugged and tough, like the country round them. Their life is hard; it is scorching hot without any shade in the day, bitterly cold at night at 6,000 feet. They still build their low windowless huts with brushwood roofs with the stones of the plateaux in dry walling. They carry on in their primitive way the stone tradition which has been lost elsewhere in the eastern area.

361 The next class of inhabitants we meet are the remote valley bedouin,
311 who live in rather better circumstances. They do have a little grazing,
342 cultivate a little land where they grow millet called dharrah and a sort of little cucumber-tomato called faguws. They live in the earthen beds of long-dried-up rivers that have a flood from the hills about once a year. They have grown lazy like everyone else, and they build their little castles
342 of mud bricks with a base of rough stones from the river-bed. A passage down the centre leads from the entrance door with almost windowless rooms for storage either side to a stair leading to a sheltered roof terrace.

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FIG. 13—Hureidha, in the Wadi 'Amd. Like a majority of the Hadhramaut cities, it is situated in a semi-protected spot. Both used and abandoned agricultural areas may be observed throughout the broad valley. This view over the tableland looks southward toward the sea and illustrates the steep-walled nature of the drainage system among even the smallest streams.

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FIG. 14—Recently discovered ruins along Wadi Hajr, near Asaan, dating from the time of the pre-Islamic Himyaritic kingdom.

P.639

8: Pike N-4 (no date) 1940 MM2 Hadhramaut MM2

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FIG. 17—Ruins of a pre-Islamic city in the Wadi Masella. The site was chosen for defensive purposes and each house was in itself a fortress.

HOT SPRINGS

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[135] Hot sulphurous springs are widely scattered in the coastal zone, and fairly accurate accounts of many of them are available. They commonly deposit gypsum in quantity. Some of the deposits are so large as to suggest either that activity was more general in the past or that the position of the spring outlets has shifted. The springs may be attributed to the same subterranean conditions that prevail in Yellowstone Park, where descending waters become superheated through close association with uncooled rocks and rise again to the surface.

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[271] Within half a mile of the coast of Hami, east of Mukalla, several hot springs are utilized by the natives for irrigation of date palms and millet and also for drinking. Neither here nor elsewhere does the

[312] FIG. 18—A view in the Wadi Masella where water is present during most of the year. The edge of the Jol appears in the background.

172 More than a hundred new Sabaitic inscriptions were copied and photographed. At three sites in the Aden and Hadhramaut protectorate, particularly the ruins of Reiboun (near Mach-had) there is, on the other hand, contacts with East Africa. Here we found an industry of obsidian (with some flint) in definite association with pottery and with Sabaito-Himyaritic inscriptions, all found in shallow kitchen middens-like remains and amongst ruins of ancient buildings and habitations. Some of the characters were actually inscribed on the pottery both before and after baking. The obsidian industry includes practically all the types and sub-types of the so-called final Palaeolithic and Neolithic cultures of East Africa—Wilton, Elmenteitan and Gumban. There are small nuclei, simple and retouched blades, truncated and notched ones, small backed knives, trapezoidal forms (in abundance), true lunates (less abundant), chisel-ended tools or *pièces écaillées* ('sinew-frayers' of Dr. L. S. B. Leakey), borers, medium-size and small burins (but not the micro-burin proper) and scrapers of various descriptions (nucleiform, round, at end of blade, etc.). Yet there can be no doubt about the Sabaito-Himyarite date of this industry in south-west Arabia (the few centuries centring round the beginning of the Christian era).

Apart from inscriptions (on stone and on pottery) there are metal elements and beads of dating value. The pottery here is much more developed and varied than in East Africa, but this is to be expected in a country with more progressive civilization. One cannot argue from the evidence we have for the separation of the obsidian industry from the rest of the datable remains which must all have belonged at least to one and the same culture phase*. If this be so, the dates assigned by Dr. Leakey and others to the so-called final Palaeolithic and Neolithic industries of East Africa will have to be revised. It would be unreasonable to argue for a 'survival' into historic times of an obsidian and flint technique in south-west Arabia after it had been introduced from the African side at a final Palaeolithic date. It would be rather in this latter region (East Africa), which produced no such highly progressive civilizations as we know from south-west Arabia, that we should expect such 'persistence'. Perhaps many of the Microlithic elements of industries in East Africa may ultimately prove to be of comparatively recent historic date (Christian era).

We have also discovered, at a number of rock shelters in the Middle Wadi Hadhramaut, rock drawings (both animals and men) of both naturalistic and schematic styles. The former were associated with Himyaritic inscriptions (mostly names and cartouches), while the latter were of much more recent appearance. At the base of some of the rock shelters we found a flake and blade industry of flint which we have reason to associate with the first series of drawings.

Anthropology

141 144 Anthropometrical measurements were made of 1,300 male individuals, of whom 800 were studied in Yemen and 550 in Hadhramaut. More than 400 individuals were photographed full face and profile. The individuals are representative of the great majority of the tribes inhabiting the area, and useful light may be expected to be shed both on local distribution of anthropological features and types and on similarities and connexions with neighbouring areas in Asia and

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133 soft silt could be carried to the middle courses of the streams. The two cycles were separated by a phase which was marked by extensive volcanic activity, especially in north-east Yaman, where the lava spreads always cover the old gravels and underlie the silts. The second cycle was followed by erosion, during which new torrential beds were cut into the silts (sometimes producing a series of erosional terraces). There has also been a still more recent (historical) outburst of volcanic activity (on a much more limited scale), the accompanying features of which are still noticeable in hot springs, etc.

We were able to associate the two physiographic cycles (or at least their depositional phases) with pluvial episodes. During Quaternary times this corner of Arabia seems to have had two major Pluvials separated by an Interpluvial. It was not possible to work out the stages of the first Pluvial, which was a prolonged one, and which must have had more than one sub-maximum (as shown by terraces); but there is presumptive evidence from one or two places that the second Pluvial may have had two sub-maxima separated by an Intrapluvial. In recent times there was a new wet phase (shown by archæological and other evidence), which we believe to have continued well into the Christian era (perhaps to the fifth century A.D.).

Archæology

172 The south-west plateau of Arabia proved to be singularly poor in prehistoric remains. Perhaps the great height (mainly above 1,500 m.) and the unfavourable climatic conditions during pluvial episodes contributed to this. It is to be recalled that very few remains have thus far been found at the high altitudes (above 6,000 ft.) of the opposite coasts of East Africa. We have carefully examined gravel exposures and have carried out experimental excavations at no fewer than fifteen caves and rock shelters in Yaman and Hadhramaut, but the results were largely negative. Surface specimens were looked for all along the route, but they were found only in very limited numbers and in particularly favourable localities; they belong typologically to Lower and Middle Palæolithic and rarely to the Upper Palæolithic. Whatever may have been the reasons, the scarcity of even surface finds shows that even if remains of prehistoric man may some day be forthcoming from this region, they will never be comparable in quantity with those from the African side. This reflects rather unfavourably on recent views put forward with regard to East Africa as a centre of cultural diffusion in Lower Palæolithic times.

Remains relating to the early historic phase of the area were, on the other hand, particularly abundant. Work and excavations at a number of places in Yaman and Hadhramaut have yielded fairly illuminating results. New light is thrown on relations between south-west Arabia on one hand and the Hellenistic East and Græco-Roman Egypt on the other, during the early centuries of the Christian era.

p. 513 (c)

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

133 The Cretaceous bed is particularly massive and juts out beyond the overlying strata to form bold headlands between the lateral wadis. The more gentle slope below to the wadi floor is due to soft red sandstones, with occasional shaly layers towards the top. They are probably the local representatives of the Nubian sandstone. Owing to their softness they are being eroded rapidly and consequent undercutting of the superposed limestone causes huge falls of rock. The result is a thick mantle of scree, consolidated in places to a breccia which almost hides the sandstones. The formation of this scree must have begun far back in the wadi's history, for not only have the talus slopes been cut into "semi-detached" hillocks, but they appear to plunge under the valley filling. Numbers of chert implements of Levallois type lie in and on the scree and argue a *status quo* as far back as the middle or later Pleistocene. In historic times also these screes and breccias were put to practical use, for tomb entrances of the pre-Islamic inhabitants of these valleys were cut through them, and sepulchral caves hollowed out in the soft sandstone slopes beneath.

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Travelling along the main wadi and up its tributaries, the beds in the bounding cliffs appear to remain at a constant level above the wadi floor. The strata cannot therefore be truly horizontal, but must rise gradually both west and south. To one used to the valley systems of Egypt a striking feature of the Wadi Hadhramaut is the monotonous flatness and uniformity of its floor (Plate 3). No great prehistoric gravel terraces mark higher water-levels, and the present flood-channel or "*seil*-bed" is a relatively insignificant feature. Obviously the most important episode in the wadi's history, after its actual cutting, was the deposition of material which filled it and its tributaries to some unplumbed depth. The upper part of this fill is a fine sandy silt, which will be described later, but there is reason to believe that gravels underlie it, for farther down the main wadi they come to light. Moreover in the Wadi 'Adim, an important tributary coming in from the south near Tarim, the 15-m. section of the wadi bank shows 4–8 m. of silt overlying thick gravel bands (Plate 5). These gravels fade out before the mouth of the wadi is reached, and have presumably plunged deeply down and may join similar deposits in the main valley.

The Wadi Hadhramaut shows a curious reversal of the normal valley form in being wider towards the source than the mouth. In the narrower stretch below Tarim, known as the Wadi Maseila, Mr. and Mrs. Ingrams found lava-flows which, it has been suggested, may once have blocked the course. Air photographs show the position of this lava, but have not conclusively corroborated the idea. The narrowing, moreover, begins before this point for no apparent petrological reason, and the cause more probably lies in the wadi's history, and is conceivably due to complicated river capture. Unfortunately time and tribal conditions prevented an examination of this area.

[361] All the detailed work of the expedition was done from the small town of Hureidha in the Wadi 'Amd, 24 km. from its junction with the Wadi Hadhramaut. Here one of the most important tributary systems enters from the south. It consists of two big valleys which divide, 10 km. from their common outlet, into the Wadi Du'an running due south for 80 km., and the Wadi 'Amd running south-south-west for over 120 km. Near the junction of the

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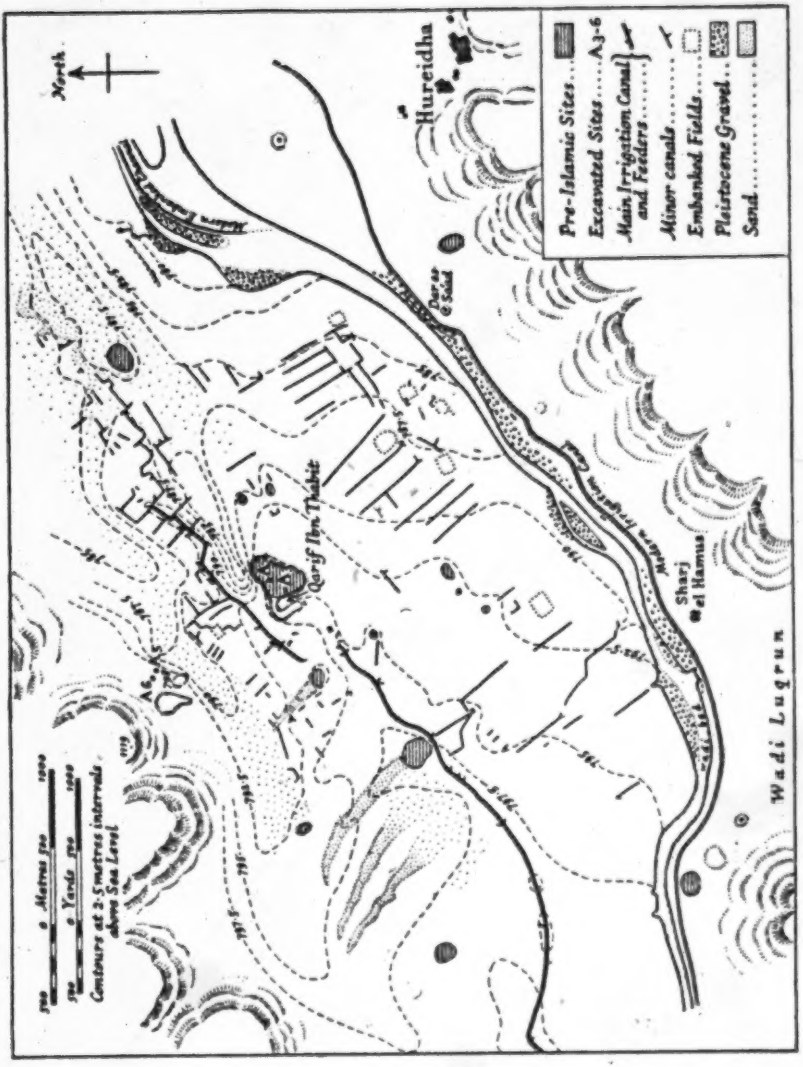

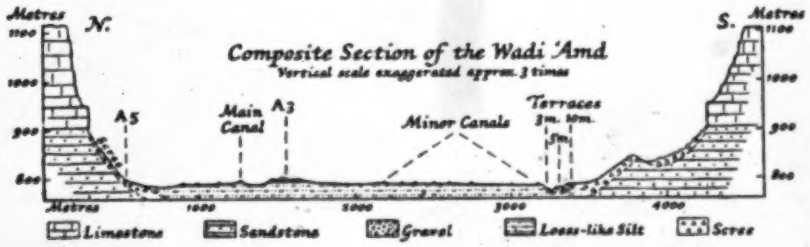

Fig. 2 P·24

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

two great wadis the silty deposit, which we propose to name "aeolian silt," has been eroded into hillocks reminiscent of those on the floor of Kharga Oasis, except that they are larger and not so stream-lined by wind. The subordinance of wind erosion in the Hadhramaut is in striking contrast to conditions in Kharga, and emphasizes the difference between a true desert-belt and one under the influence, however incompletely, of the monsoons.

The work around Hureidha consisted of the examination of the geologically recent deposits, and the detailed mapping of a small area around the ruin field (Fig. 2). The section, Fig. 2, shows that the structure of the valley is the same as that in the Wadi Hadhramaut.

The valley filling is the dominant deposit. It is on the whole a fine-grained material, largely arenaceous but with a certain amount of clay. Structurally it shows the prominent vertical jointing so characteristic of loess and aeolian deposits in general. Yet this is not the only guide to its origin, for clay bands and occasional scattered lines of pebbles point also to water action. It seems therefore convenient to use the term "aeolian silt" for this deposit to represent its composite character, part wind, part water-laid. Water action would seem to have played a greater rôle here than in Kharga, where wind bedding, absent in the Hadhramaut, is common. A good section was examined in the banks of the flood channel north of Hureidha (Plate 6). Two darker banks can be seen running nearly horizontally 1 and 2 m. from the top of the section. These are formed of more argillaceous material, and clay balls were common in the sandy layers. Here and there a pocket of land shells lying at all angles was found. These were mostly *Zootecus insularis* Ehrn, but a few *Obeliscella bentiae* M. and P. and *Pupoides* sp. also occurred. The full depth of the filling could nowhere be ascertained. The wells in the floor of the Wadi Hadhramaut are shallow, and in the Wadi 'Amd, though very deep,[1] they are in the rising sides of the valley. In discussing the age of the aeolian silt we can therefore speak only of the upper layers.

In the Wadi 'Amd good dating evidence was obtained in the north bank of the flood channel opposite the Wadi Luqrun, a tributary wadi entering from the south near the village of Sharj el Hamus (see Fig. 2). Here a magnificent section is exposed in a cliff 10–8 m. high (Plate 7). It is capped by four or more metres of aeolian silt which stretches away northwards and forms the whole floor of Wadi 'Amd. This is underlaid by two gravel bands separated by more aeolian silt, which in turn underlies the lowest gravel and forms the floor of the flood channel. The gravel bands are about 1·5 m. thick, and consist of medium to small limestone pebbles with occasional ones of chert or tufa. Both bands contain chert implements but they are particularly abundant in the lower. In the sides of the erosion channels the gravels are seen to tail out northwards and eventually disappear. They obviously represent the outwash fans of the Wadi Luqrun, which seems to have been capable of carrying gravels while the main wadi was bringing down silt only. The tools in these gravels are of Levalloisian flake type, and date the uppermost layers of silt in the Wadi 'Amd. Confirmation was obtained by finding a good unworn tortoise core embedded in the silt at another spot.

[1] Van der Meulen and von Wissmann state (*op. cit.*, p. 98) that some are about 300 feet deep.

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

muddy tufa still being deposited. No living thing was seen in the pool, but dead shells of *Bulinus*, probably *truncatus*, were collected from the muddy edge. They are small and distorted, probably owing to the excess of lime.

In a wadi still farther up the lateral valley, the Wadi Sam'ua, a series of pools occurs at the foot of successive steps in the ravine bed above the Cretaceous limestone. These pools were not so deep as El Bahr and had abundant life: fish, frogs, beetles were all seen, and two univalves (a *Planorbis* and a new species of *Ancylus*).[1] The wadi narrows to a steep-sided ravine in its upper reaches; yet clinging to the side above the first pool was a mass of tufa 4 m. high. Other pools, backed by tufa cliffs with suspended stalactites, lie at still higher levels. Here exploration had to stop, but enough had been seen to establish the interest of the terrace tufa in these upper reaches.

From the above account it may be deduced that the main events in the wadi's history are as follows:

Major erosional phase, when the great Wadi Hadhramaut and its main tributaries were cut. This in all probability took place in stages. From the amount of erosion and the many changes in the wadi since its development, the time of cutting must be at least as early as late Tertiary or early Pleistocene, and may well be far older. It cannot, as has been suggested, be synchronous with the Glacial Age in Europe.

Major depositional phase, also probably subdivided into minor episodes. The valleys were filled to some unknown depth with deposits. The upper part of these is aeolian silt of palaeolithic age, which is known to overlie gravel in some areas. In the lateral wadis tufa formation had begun.

Minor erosional phase, represented by the cutting of the aeolian silt and deposition of gravel in place of silt. This can be subdivided into three parts, the 10, 5, and 3-m. terraces, also of palaeolithic age. The flood channel then followed the same restricted course as now.

It is interesting to note that these three main phases were traced in Kharga Oasis; but there, the evidence being more complete and varied, and the time of study far longer, they could be subdivided and dated with more certainty than in the Hadhramaut. No sign of a historic pluvial was seen in that part of the country which we examined.

Archaeological notes

Quaternary palaeoliths have, in the foregoing pages, been noted: on the Mukalla gravel plain; on the spurs of the *jol* near the south edge overlooking the Wadi Hadhramaut above Tarim, in positions recalling their distribution on desert cliffs overlooking the Nile valley; on and in cliff screes of the Wadis Hadhramaut and 'Amd; and in the 10, 5, and 3-m. gravel terraces of the Wadi 'Amd near Hureidha, and in the somewhat earlier aeolian silt of the valley's main filling. These discoveries of palaeoliths were no novelty, for Mr. and Mrs. Ingrams had already noted them in many places,[2] but they had not, I believe, been previously found in geological deposits. Nor must our restricted

[1] All shells from the Hadhramaut have been given to the British Museum. Major Connolly is kindly identifying them and will publish the results in his forthcoming work on the shells of the Yemen collected by Dr. Scott, of the British Museum.

[2] *Geogr. J.* 92 (1938) 306.

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

172 distribution list be taken to indicate more than the limitations of our wanderings, not those of palaeolithic man, who doubtless ranged over the whole area wherever water, game, and raw material for his tools and weapons could be found.

The technique of the implements collected, though falling well within the recognized limits of a specific palaeolithic culture—the Levalloisian—is almost uniformly crude compared with African, North Arabian, and Palestinian specimens of similar types. This may be due in part to the very bad quality of chert yielded by the local limestones; but since in other countries primitive man frequently triumphed over refractory rock, and succeeded in making from it symmetrical and serviceable implements in forms traditional to his peculiar culture, the excuse here is not wholly valid. It represents also, one may surmise, a genuinely low ebb in contemporary palaeolithic standards, indicative possibly of an over harsh and impoverished environment, but perhaps due in still greater measure to absence of contact with more progressive groups. This last postulate presupposes the separation at an early date in the Pleistocene, or before, of South-west Arabia from East Africa; for East Africa was, throughout the entire span of the palaeolithic period, in a position to provide just the technical stimulus lacking, apparently, in Southern Arabia.

In East Equatorial Africa an unbroken succession of Stone Age industries, made known in the first instance by Mr. E. J. Wayland and by Dr. L. S. B. Leakey, begin in Lower Pleistocene deposits and progress steadily through a series of vast physiographical happenings, which include rifting, uplift, vulcanicity, reversals of drainage, eustatic, and climatic changes, until the end of Upper Pleistocene times. No attempt can possibly be made without vastly more prolonged specialist work in South-west Arabia, and the accumulation of a store of comprehensive and independent data, to correlate the two areas. It is legitimate only to note that uplift, vulcanicity, eustatic, and climatic changes are all registered in the Hadhramaut (and also, as shown by Dr. Huzayyin, in the Yemen), though neither their geo-chronological relation to each other, nor to human history, can yet be ascertained.

But another line of reasoning reinforces the likelihood of the early marine separation of the two continents. Palaeolithic industries, legion in number and distressing in nomenclature,[1] are morphologically classified by prehistorians into three main culture groups, irrespective of relative age. They comprise hand-axe industries, flake industries, and blade industries.

The distribution of the first of these, the hand-axe culture group and its derivatives, includes practically all Africa—certainly all East Africa from north to south. Yet it failed, as far as the evidence goes, to reach South-west Arabia. In the Hadhramaut, though it is perhaps still too early to be conclusive, neither we nor Dr. Huzayyin's party found a single specimen; and the solitary example recorded by him in the Yemen [2] seems far more likely to have reached it from the north, where, in Palestine, Syria, and Transjordan, the type, in certain phases, is well entrenched.

A crude flake industry of Levalloisian type belonging to the second class

[1] In East Africa for instance at least ten distinct palaeolithic industries are known, with some two dozen subdivisions.

[2] *Op. cit.*

A crude flake-industry of Levalloisian type belonging to the second class 172 138

mentioned above would seem alone to represent palaeolithic man in the Hadhramaut, where it was free from the development which in N.W. Europe has necessitated seven subdivisions. The earliest appearance we could trace was *in situ* near the top of the aeolian silt of the Wadi 'Amd infilling. In chronological succession follow the 10, 5, and 3-m. gravel terraces laid in a stream-bed cut in this silt. The scarce contents of the 3-m. terrace are derived from the two higher ones, which however show no variation in type *inter se*.

Eventual discovery of the palaeolithic contents of the older, deeply buried silt levels and gravels would be of great interest; but we may risk already the conclusion that the flake industry found *in situ* continued, isolated and unchanged, throughout a very long geological period, which we tapped at only one or two points. It would be rash on existing evidence to place its probable position in the Pleistocene, though it may well prove to lie in the middle: typology alone is insufficient, and archaeological stratigraphy will need first to be established in cave or man-favoured geological deposit, if such exist, and our failure to find a single fossil animal bone in the gravels rectified.

So much for the first of the archaeological objectives. The second of them —namely contacts with the chalcolithic east—drew a complete blank. I myself found, was shown by natives, or observed in the miscellaneous antiquities gathered together in Aden no single object which indicated any such early contacts with the Hadhramaut. Of later antiquities however there was no scarcity. Though the Wadi Hadhramaut itself in the stretch examined around Tarim, Seiyun, and Shibam yielded little except rock graffiti pecked in South Arabian characters, and accompanying animal engravings in restricted numbers, the major lateral wadis seem to offer better prospects to the excavator. 172

The fairly extensive pre-Islamic ruins at Sune in the Wadi 'Adim were visited for a few hours from Tarim, and sherds and other samples collected from the surface for comparison later with more westerly sites. Here too were lying numbers of the microlithic obsidian flakes in geometric forms—trapezoids, triangles, rectangles, and crescents, neatly retouched on their lateral edges—which Miss Stark had also collected in 1935 on the ruin-field of Gheibun near Meshhed in the Wadi Du'an, and had kindly shown to me.[1] I had then recognized their kinship with the latest microlithic obsidian industries in Kenya, and was prepared, in the absence of the necessary corroborative evidence from other archaeological factors, for a date considerably earlier—possibly in the second millennium—than anything hitherto known from the ruins of the old South Arabian kingdoms. Their occurrence also at Sune, amongst the dusty rubble heaps of the stone-built ruins, though suggestive of true contemporaneity could not, without excavations, be conclusive.[2] Any doubts there might be vanished later at Hureidha in the Wadi 'Amd, where my excavations of a pre-Islamic temple and its contemporary tombs, no part of which could be earlier than about the sixth century B.C. and which were mainly or entirely some centuries later, established beyond question the

[1] 'The southern gates of Arabia,' p. 166. Mr. and Mrs. Ingrams had also collected them there in 1934 (*Geogr. J.* 88 (1936) 524–51), but not, I think, the crucial types.

[2] Dr. Huzayyin in 1936 also collected these obsidian tools at Gheibun, and felt assured their date was that of the ruins.

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

172 fact that geometric microliths, which in Europe and the Mediterranean area existed long before 3000 B.C., were still flourishing in South Arabia at this late date.

[171] If analogy may be trusted, as I think here it may, the little trapezoids were used as arrow-tips, of a form well known in prehistoric Denmark at least six thousand years ago, and common (whether in flint, chert, chalcedony, or obsidian is immaterial) over large parts of Europe and the Mediterranean, including predynastic and dynastic Egypt, at various dates down to 2000 B.C., or in the Sudan over a thousand years later. In Mesopotamia Sir Leonard Woolley has recorded a variant of the type in the royal tomb of Mes-Kalam-Dug at Ur. Dr. Grahame Clark in drawing attention to this discovery [1] suggested the possibility that the type, being of such antiquity, was used for symbolical purposes in a royal grave only, and not in the other, contemporary, burials. Be that as it may, the little arrow-tips were noticeably associated with the burials we examined in South-west Arabia, though not to the exclusion of the other types, amongst which the rectangles are almost certainly sickle-blades.

That these obsidian implements in the Hadhramaut owe their appearance to African influence I have little doubt. In East Africa their progenitors, the third of the three great culture groups referred to above, are strongly entrenched, and range back uninterruptedly into Upper Palaeolithic times. In South Arabia on the contrary they appear to have no ancestry. Until analyses have been made it cannot be certain from whence the obsidian came, and perhaps not even then; for it is likely that the eruptive areas of South-west Arabia yield a volcanic glass indistinguishable from the East African variety. Local Badawin asserted that obsidian was to be found "in the mountains," pointing south-west from Hureidha. But how far away they meant remained an unanswered question.

Our excavations have been recorded in brief outline in *Nature* (vol. 142, 23 July 1938), and the results will eventually be fully published. They were confined to a spot in the Wadi 'Amd near Hureidha, which Miss Gardner and I reached on December 20.[2] The little town, about 850 m. above sea-level, compactly nestles, in approved Hadhramaut fashion, on the steep scree of a snout of cliff projecting at the confluence of a lateral wadi with the Wadi 'Amd (Plate 3). December 22 and 23 were given up to the absorbing task of examination of the ruin-field, skirted by von Wissmann and Van der Meulen in 1931.[3] It lay about an hour's donkey pace from the town, on the barren plain of aeolian silt filling the main valley, and proved to be a scattered and unenticing affair covering about 10 sq. km., and giving little hope of depth of deposit. Small evenly spaced stone-rubble heaps, at first sight puzzling, sprang from bare wind-swept ground. These, thanks to Miss Gardner's subsequent mapping, proved to be the vestiges of an old irrigation system; here also the outlines of ancient fields and boundaries could be traced. My decision to excavate rested on small beginnings. Across the plain, nearing the opposite cliffs, a sudden heaping up of consolidated and stationary sand-

[1] *Antiquity*, June 1935, pp. 210–15.
[2] Miss Stark was then in hospital at Aden, but rejoined us.
[3] *Op. cit.*, p. 199.

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

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dunes called for explanation. The sand must have been immobilized by something, we argued. With a first recruitment of six local men and four boys, soundings were made the following day, and we soon struck the foundations of a large stone building. Thus was discovered the temple of the Moon God, Sīn,[1] the first of its kind recorded in Arabia. It provided the complete ground-plan of a pagan semitic sanctuary, over fifty dedicatory inscriptions, and accessory details of baetyllic cult. The temple must have stood, unprotected and conspicuous, on a slight eminence overlooking in both directions the length of the level plain, then diligently watered and cultivated (Plate 10). Its enlargement, at two later periods, and the gradual rise in pavement levels, imply security over a very considerable length of time. No village appears to have flourished in the immediate vicinity, and the secular habitations on the plain around seem to have consisted of isolated farmsteads which lie buried beneath mounds. One such was excavated,[2] and proved, by the pottery, to be contemporary with the temple.

These discoveries went far to fulfil the third of my archaeological objectives. But the collection of more utilitarian material than a sacred edifice normally produces became urgent, and time was short. The paramount importance of common things is axiomatic in archaeology, eclipsing in value all the rarities beloved by the uninitiated; and never more so than at the beginning of research as in South Arabia, where even the pre-Islamic pottery was virtually unknown.

The temple deposits were singularly poor in potsherds: these were moreover in small fragments, and not a single complete vessel was found. The scarcity also of pottery in the farmstead site suggested that we were dealing with a people, then as now, making and using little earthenware, and relying on skin, wood, and stone for their domestic receptacles. To remedy perhaps these deficiencies, as well as to obtain facts concerning the physical types of these early South Arabians,[3] the discovery of graves was essential. A sedentary Badu in possession of a few ancient beads and a stone incense burner volunteered non-committal information, and Miss Gardner went off to report. It became clear that tombs existed in the lower scree slopes of the northern cliffs, only 1 km. from the temple; indeed our informant lived, comfortably and apparently unsuspectingly, with his family in an anciently robbed one.

The excavation of two in this vicinity[4]—a lengthy affair, as they were large collective sepulchral caves about 8 m. in diameter hollowed out by hand in the sandstone underlying breccia—occupied the remainder of the season, and yielded besides beads and other trinkets a big group of the required pots intact, which will form the essential basis of a South Arabian *corpus*. The skulls are uniformly long-headed. Seals derived from probably Achaemenid

[1] Position is marked A3 on the map, Fig. 2.

[2] Position is marked A4 on the map, Fig. 2.

[3] The generalization has been made that North Arabians are predominantly long-headed, the Southerners round-headed (Hitti, 'History of the Arabs,' p. 30). See also Professor Seligman's remarks (*Geogr. J.* 87, 88 (1931) 34, 239) regarding Mr. Bertram Thomas's anthropometric data from S.E. Arabia.

[4] Marked A5 and A6 on the map, Fig. 2. Further tomb work was sadly abbreviated by a long bout of fever in February.

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

172 prototypes give a *terminus a quo* in the sixth to fourth centuries B.C., and suggest the probability of a later local date extending into Roman times.

The jumbled rubble mounds, some 2 m. high, scattered over a wide area of the Hureidha ruin-field, when mapped in detail, fell into orderly lines. They were, in fact, the remnants of an extensive irrigation system which surrounded the pre-Islamic valley sites. The clue to their origin was first found north of A3 and A4. Here in sand-covered ground a parallel line of stones 16–20 m. apart was traced east and west for some distance. Small channels took off from it at an acute angle, always directed eastwards. The broad parallel was clearly a main canal feeding the land on either side. At intervals the stone-covered mounds branched off at right-angles to the main line and to each other, and an examination of their structure quickly showed that they too had been integral parts of the system, placed at nodal points or junctions. The main canal was finally traced continuously for 1200 m. in the immediate neighbourhood of A3, and mapped for more than 3 km. west, or upstream, from that site.

It will be seen from the map, Fig. 2, that the main canal follows the highest ground of the wadi floor and has a fall of 1 m. in 455 m. for the westerly portion. In this part it is ill-defined and marked only by a concentration of pebbles as a 20-m. band along its course. Its nature however is clear from the presence of the minor channels which take off on either side. Just west of A3, near the stone foundations of a house, the line is lost altogether, and is next picked up 250 m. farther north after a fall in level of nearly 2 m. It is probable that erosion has destroyed all traces of this connecting stretch.

From the lower level the main canal runs along a narrow ridge, possibly partly artificial, enclosed by the 792·5 m. contour. It maintains a fairly constant width throughout this stretch of 800 m. and makes two pronounced right-angle bends about half-way along. Just after the most westerly one on the N.–S. leg there is a sudden narrowing to 6 m. for a distance of 10 m., then the full 20-m. width recommences. This probably marks a contrivance for measuring the flow of water. At the eastern end of the 800-m. stretch the 20-m. canal stops, and a pair of 8-m. channels branch off north and south at right-angles. The system then becomes obscured by sand, but it seems to branch into ever narrower channels. Beyond that point no canals were seen, but a settlement or farmstead lies 1 km. beyond the last one mapped and probably was served by the same system. To the south of A3 there is a smooth even slope for 50 m. or more with few or no traces of canals. Then the network begins again. The N.–S. components are the strongest, which is natural, since not only are they the most important but the E.–W. ones would lie right across the drainage line and therefore suffer most from erosion.

It seems probable that the sections of canals now missing were made, as are their modern equivalents, by silt thrown up from the valley floor. Only the important points such as junctions and crossings were stone-built, and these have been left by erosion on isolated mounds, which have themselves been severely reduced.

There seem, then, to have been three types of channels: the main canal which led water from farther afield into the area, and a dependent secondary and tertiary system. The secondary channels are those which took off at right-

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

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10. Platform of the Moon God temple near Hureidha

11. Ruin of irrigation dam revetment in Wadi 'Amd

facing P. 34 (B)

16: Gardner A-4 (1937-38) 1939 MM2 Hadhramaut MM2

172 angles to the main one, and which distributed the water to the field-plots: these are from 4 to 8 m. broad and approximately 2 m. above the general ground-level. The irrigation of the fields themselves was directly controlled by the tertiary system, which consists of short narrow 1-m. ditches, taking off at an acute angle either from the main or secondary channels. The total area covered by this network was about 7 sq. km., and its various parts can be paralleled in the modern irrigation system.

Near the southern edge of this system there are several fields bounded by high silt banks. These are marked on the map by strong dotted lines, and some can be faintly distinguished in Plate 3 on the edge of the valley floor beyond the flood channel. They may be later in date, but in one case a stone inlet and outlet channel was found similar in all respects to the ancient work. The ground-level was here about RL 787 m., the inlet channel at 788·2 m., and the outlet at 787·7 m. Many of these fields have been intermittently cultivated in modern times by means of rainfall only.[1] A scatter of sickle flints and microlithic obsidians was found over the entire irrigated area. It may be noted that obsidian implements were absent on all the Islamic sites examined.

312 [245] 172 At the present day the flood waters are led off the flood channel several kilometres above Hureidha and are carried down by a 4-m. channel running on the south side of the wadi (see Fig. 2) till they reach the palm groves of the town, where they divide and water many thousand palms. As the ancient system was so similar to the modern it seems probable that it resembled it in this respect also. Within the area mapped there was no sign of a supply from the flood channel. The main canal never approached it and the minor ones were actually truncated by it. A day was therefore spent in riding up the wadi in the hopes of finding the take-off of the main pre-Islamic canal. Traces of it were followed for 16 km. but nowhere did it approach the present flood channel till the latter swings across the valley floor towards the north cliffs (Plate 3). Here a well-defined ancient canal is truncated by the wadi bed. It has 2 m. high gravel-covered banks, 30 m. apart, and can be clearly traced for 80 m. or so in an eastward direction. Beyond this point there is no sign of it, and here may therefore be the actual take-off of the flood waters which fed the ancient supply.

Possible confirmatory evidence was obtained about 1 km. upstream. Here there is a remnant of a V-shaped dam which projected from the southern bank part-way across the stream and would have served to divert the current to the entrance of the channel (Plate 11). In the bed itself only the foundations of this dam remain as a band of stones $3\frac{1}{2}$ m. broad, wedged on both sides by larger, more regularly laid material. The downstream arm is 40 m. long and the upstream one 63 m., with a base of 81 m. along the wadi bank. The upstream branch springs from a base that wedges into the gravel of the bank for 2·6 m. The sloping sides are composed of wedge-shaped limestone blocks: eighteen courses high, probably the full number, are preserved on the downstream side and fourteen on the upstream. The infilling is of gravel. No sign of inscriptions or well-dressed stones were seen, and the age must therefore remain conjectural; but local tradition knows nothing of its history.

[1] Mr. Ingrams notes that in the Wadi Maseila the fields are constantly changed—'Hadhramaut' (Colonial Office Report No. 123, 1937, p. 59).

18:Ingrams G-3 (1934-36)1938 MM2 Hadhramaut MM2

them from retaliation on the Sei'ar, the traditional enemies of most of the Hadhramaut.

The men of the Manahil, Mahra, and those distant sections of the Kathiri who live up amongst the Mahra on the confines of the desert, take their mothers' names and not their fathers. Ordinarily of course Arabs call themselves Hassan bin Muhammad for example, but these people say Hassan bin Maryam. The Manahil and the Hamumi and some of the other tribes are almost exclusively monogamous and the women, who in some parts are not veiled, are extraordinarily free. A man proposes marriage to the woman direct, and her father will say it is not his concern. Bride price is very high, but the bride brings a lot of stock with her.

I have not journeyed far down the Wadi Maseila on the ground during the last tour, though I had been invited to attend the pilgrimage to the tomb of the Prophet Hud. However as I had not the time to go Seiyid Bubekr took me on the first aerial pilgrimage, as he called it, and the beautiful tomb in its picturesque surroundings crowded with a record pilgrimage presented a great contrast to the last time my wife and I had seen it, out of season when we were travelling down the wadi to Seihut. I noticed on this occasion the ruins of an ancient town on the very edge of the *jol* above 'Einat, and I think these are about the only ruins there are in such a situation in the Hadhramaut.

There is perhaps no need to say more of the big towns of the wadi, Tarim, Seiyun, and Shibam, or of the fertile lands between them now happily all at peace. The famous trench system of Al Ghurfa is now disused and the town is open to traffic, so that cars no longer have to skirt perilously round its walls. The whole place has been green with crops, a record millet crop last year and a record barley crop which was being harvested when I left in April.

Seiyun has changed in some ways, for like Tarim it has a new landing-ground used not only by the Royal Air Force but by civil machines, and in the town itself I have an office—for I am also Resident Adviser to the Kathiri Sultan—and there is a newly uniformed body called the Kathiri Armed Constabulary recruited mainly from the Sultan's slaves. I think it is generally known now that these so-called slaves are in fact much more independent than many free men, but it may not be so well known that with the full agreement and co-operation of the Sultans steps have been taken to grant freedom to any slave who desires it. The camel park has been moved from beneath the palace and there preparations are being made to lay out a small garden surrounded by the arcade in which are the police station, the post office, and a small dispensary.

Seiyid Bubekr's house which was being built when we first visited Seiyun three years ago is now finished. Its architecture is, I think I may say, not approved of by Miss Stark, as she no doubt will tell you, but it is a remarkably comfortable house, and when the family is living there a very happy house to stay in; but for some months Seiyid Bubekr's family has preferred to live in another big house of the old-fashioned kind in the town. Living in the empty Dar es Salaam, as it is called, gave me so much the feeling that my wife and I once had when we spent a day or two as the only guests in an enormous hotel in Belgium out of season that I prefer to live in the other house with Seiyid Bubekr. Many are the people who have enjoyed his kindly

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and there was a general desire for peace in order to get on with the work in the fields.

My wife was accompanied by Seiyid 'Alawi al 'Attas and Jemila, a devoted maid servant of the family, who perched precariously on the back of my wife's camel singing Badawin war songs. My wife learnt some of them and they proceeded up the wadi singing duets. Besides being an amusing companion Jemila was a very useful one, for she proved an excellent lady's maid and a masseuse as well. Seiyid 'Alawi has married a tribeswoman, so the party stayed at Zeila in the house of his brother-in-law, one of the principal Ja'da chiefs. Like many Ja'dis their host had been to Java, but the only sign of his travels was a bicycle which he had brought back with him and which he said he preferred to a camel. From Zeila they rode through many small villages to 'Anaq belonging to the Al ash Shaibi, who are credited with possessing the Evil Eye and consequently shunned as much as possible. Seiyid 'Alawi thought it prudent not to mount his camel till the village had been left well behind, in case he was made to fall off by some evilly disposed person. They spent a night at 'Amd, which is almost at the end of Ja'da territory, for a little farther up the wadi the Madhi tribe have their habitat. All the villages in the wadi are much alike with a few three- and four-storeyed houses set amongst smaller ones, and most of them have well-built tanks for catching rain-water. Particularly in the left bank there are many dug-out caves, largely used now for habitation and grain stores. Miss Caton-Thompson says that these were probably all Himyaritic tombs. I think some cave dwellers she met were rather put out when she told them they were living in tombs. Many of the Al 'Attas family, who have much influence over the Ja'dis, have been canonized and their domed tombs are objects of veneration in several villages. My wife's appearance was taken for granted at 'Amd, where she spent a night with women who had been to Java and had seen European women before. They had brought back a few momentos of their travels and impelled by the same spirit that makes us hang Eastern curios on our walls they had hung up a pair of cheap European high-heeled slippers for the admiration of their untravelled friends.

From 'Amd they returned down the wadi following the left bank and passed many ruins, most of which covered low spurs jutting out from the cliffs. At Husn Ba Qasm there are ruins known as 'Adiya Qudha'a which may indicate the site of what was once the principal town in the wadi, as in the days before Islam it was called Wadi Qudha'a. Near the large village of Bateh they passed the time of day with a man who spoke to them from a second-storey window of his house as he dared not go out, for he was carrying on single-handed a war with all his neighbours. Like many others with whom my wife talked he asked for peace. Another had said "We want peace, we're sick of fighting. A man works in his fields and is shot dead—what's the use of it?" And another stopped them and said: "A country without a government is not a country. Bring us peace and settled government."

Returning to Shibam, which is of course the principal Qu'aiti town of the interior, there is west of it past Al Qatn and as far as the junction of the Wadi Du'an a bloc of Yafa'is, with a few Kathiris surviving in such places as Ajlania on the junction itself and also in the Wadi 'Amd. These Yafa'is have been

18:Ingrams G-3 (1934-36)1938 MM2 Hadhramaut MM2

that of the Sultanates of the West, though I was interested to find that there was a small Jewish community, and this is the nearest that any Jews have got to the Hadhramaut. The Balhaf Sultan, an intelligent young man whom I have known for a long time, came to see me in Seiyun and asked us to help in extending peaceful arrangements to his country. Though most of the sections have signed the truce the situation is still far from settled, as Miss Stark, who arrived at 'Azzan from the Wadi 'Amd shortly after my first visit, will tell.

A short distance down the Wadi Meifa'a from 'Azzan are the ruins of Naqab al Hajar described by Wellstead a hundred years ago. This is Meepha Metropolis. I have only seen the ruins from the air, though Miss Stark has recently visited them. There are inscriptions also at Husn Gharab on the coast which Mr. Martens, one of this winter's visitors, has recently seen. He too was well received.

Bir 'Ali is the other Wahidi Sultanate and, though the old Sultan has no claim to rule outside his wedge-shaped little walled town, he is unfortunately at present unwilling to compose his long-standing differences with the Balhaf and 'Azzan relatives, which makes settlement more difficult. I have lately had both Sultans in Mukalla and tried to get them to bury the hatchet.

I have had little opportunity in this last tour to do more for the Mahras than visit Qishn, their capital, occasionally, and Socotra I have not visited since 1935. It may perhaps be remembered that the Bin Zueidi section of the Mahras did not exactly welcome us when we arrived at the coast through the Wadi Maseila in 1934, and a couple of months ago for the first time the Mahras asked for intervention in their internal affairs, as the Zueidi tyranny in Seihut had become acute. We are now trying in the normal political way of advice and exhortation to induce them to cease their exactions on unarmed merchants and peaceful citizens in a town in which they have no lawful concern, and I paid my last visit to Qishn a day or two before I left Mukalla.

I had intended to visit Gheidha, the most eastern landing-ground in the Aden Protectorate, but we did not get so far and made a landing at Haswein just west of Cape Fartak. The inhabitants said it was the first time that Europeans had been there, though they called me by my name as soon as I stepped out of the machine. These coastal Mahras are a peaceful folk engaging mostly in fishing, and they have pleasant breeze-swept villages of a simple style of architecture, unlike the Hadhramaut but which reminded Mr. Figgis, who was with me, very much of the Arab dwellings in Northern Nigeria. I do not believe we could really have been the first Europeans to visit the place as there is quite an adequate account of it in the Red Sea Pilot, perhaps derived from a visit of Captain Haines in the *Palinurus* over a hundred years ago. Perhaps too there had been a much earlier European visitor, for authorities on classical geography usually identify Ras Fartak, Cape Syragrus, the Boar's Head, as the point from which Hippolus set forth in about A.D. 45 when he discovered the changes of the monsoons. I have long had a wish to put up on this majestic cape of Fartak a simple obelisk with the inscription, a quotation from the *Periplus*, "Hippolus discovered the changes of the

19: Serjeant U-4 (no date 1949 MM2 Hadhramaut MM2

this reduction should be made, issued a decree (taḳrīr) defining the wages of the various categories of people engaged in building. The workmen still refused to accept the revised wages, and some left Tarīm and went to the independent Ḥawṭah of Thibī, outside it and beyond Kathīrī jurisdiction. Some however stayed in Tarīm, but worked at collecting firewood, and refused to undertake building. A *modus vivendi* was established through the good offices of Saiyid Bū Bakr al-Kāf, but whereas, before, the wage of the builders had been two three Āl Kāf ḍarībahs per day, which the wealthy had attempted to reduce to one ḍarībah only, after the dispute all the workmen received three ḍarībahs [10].

To revert to the sacrifice on the sās, I noticed in the fine archaeological site of the town known as Am-'Ādīyah [11] that on some buildings an inscription was located at the *corner* of the sās which was constructed of the typical lozenge-backed Himyarite hewn stone, and that it stood about three feet from the ground. Possibly therefore it was sometimes a custom to place inscriptions in the sās about the place of the sacrifice; they could not be placed higher as the wall above this point is of adobe. These particular Am-'Ādīyah inscriptions are very weather-beaten, and to the best of my knowledge no attempt has been made to copy them.

An interesting feature of Ḥaḍramī building is the shape of the columns, generally carved from 'ilb wood, which strikes one immediately as descended from an ancient tradition. In the Ḥawṭah of Thibī near Tarīm, I first saw the curious capital sketched (fig. C.) from below, with its little round pendants underneath the rectangular blocks. Later I realised that this was a very stylized type of capital, derived from a prototype somewhat resembling the examples in figs. A & B., sketched in my field-book at 'Azzān and

[10] Reproductions of the ḍarībah in J. A. S. Buckhill, *A note on some coins struck for use in Tarim, Southern Arabia, Journ. of the Malay of the Royal Asiatic Society* (Singapore, 1925), III, 1. It is the coin which has the number 16 written on it. There were about five to six ḍarībahs to the riyāl (kirš franzāwī).

[11] For notes on this town see S. Pirowne, *'Im'adiya and Beihan, Aden, Antiquity* (London), xiii (1939), p. 50. The author confuses the name إمادية with عمادية, but it is really the South Arabian article Am = Al, followed by the word 'Ādīyah. It is therefore « the 'Ādite city » which means little more really than « the ancient city ». I visited it in 1941.

21: Thomas T-5 (no date) 982 MM2 Hadhramaut MM2

ocean escarpment, but in the Hadhramaut they intrude for over 120 miles to the northwards. Beyond them and between them and the southern edge of the sands is a wedge-shaped plain narrowing westwards and falling from south to north and from west to east. The edge of the sands at Mugshin is about 490 ft., at Shisur about 935 ft., at Shuait 950 ft., and to the west not improbably rising to 2,000 ft. or more in the neighbourhood of the Najran. This plain is crossed by dry wadi beds, or what Burton calls "fiumura." They take their rise in ravines deeply eroded in the limestone of the mountains and they become more shallow as they run northwards, until, as they approach the sands, they are almost indistinguishable from the steppe in which they are merely shallow depressions marked here and there by scrub. These wadis are the arteries of approach for Badus journeying from the mountains northwards. They are evidence of a very different climate from what now prevails, the deep gorges are doubtless the result of torrential rain action. To-day the country is extremely arid, and rainfall is slight or negligible.

Arabia is said never to have had an ice age, so that when the territories of the higher latitudes of the Northern Hemisphere lay beneath an ice cap, Arabia must have enjoyed a pluvial period, and it is from this time that these great gorges running northwards on the desert side of the South Arabia escarpment possibly date. I picked up many fossils on the edge of the sands, which must have been washed down in bygone ages. These were of limestone formation and have all been identified as belonging to the Middle Eocene period. The tradition of ancient trade routes across what is now almost a prohibitive barrier of sands, should not therefore be dismissed as unreasonable: it may connote that a very early civilization existed in this region. Indeed caravan tracks of great antiquity were pointed out to me in lat. 18° 30′, long. 52° on the very edge of the sands and leading on a bearing of 325° into what is now a drought-stricken waste of sands. The Badus called this "the road to Ubar," a town which they say lies buried, according to their tradition, beneath the sands that are ever encroaching southwards. Whether the words "Ubar" and "Ophir" have any sort of connection it is impossible to say, but the alleged site of this buried city is on a direct line from the frankincense country of Dhufar to the most probable site of Gerrha on the Persian Gulf, and to Petra in Nabathaea, the great marts of the classical geographers.

Other archæological remains are the old ruined townships of the plain of Dhufar and the trilith monuments I discovered in the frankincense country just over the Divide.[1] The former would appear to preserve a link with ancient Abyssinia, for the characteristic architectural feature is a monolithic column which, according to Bent, is common to that area, but is nowhere found being made to-day in Arabia. As regards the significance of the trilith monument, accurate memory of it has faded from the tribal mind. This brings us to the inhabitants themselves.

The nomadic tribes living in the Southern Steppe are Bait Kathir, elements of the Mahra, Manahil, Awamir, Sa'ar and Mashai (Bal'Ubaid). In the mountains in northern Hadhramaut and the hinterland of Aden are two other interesting types, Hamumi and Yafi. With the

[1] For a detailed account see "Among Some Unknown Tribes of South Arabia," *Journ. Roy. Anthrop. Inst.*, vol. xiv, 1921, pp. 107 *seq.*

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Trekking over the *djôl*.

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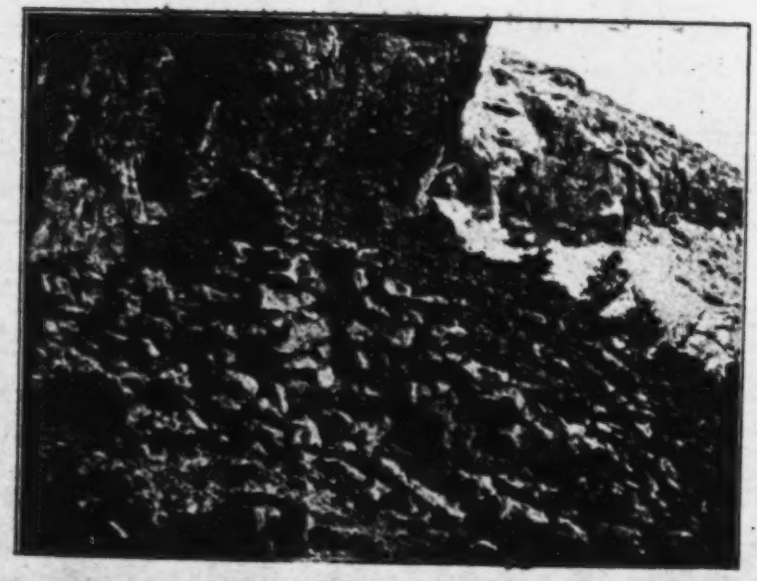

The Dār ʿĀd, ruins dating probably from Sabaean times.

[facing p 86]

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

that is to say, small piles of stones on which a fire is made till they are hot and on which meat can be roasted.

The number of people in this village who seemed to be afflicted with blindness or with other diseases of the eye was startling. The cemetery, which lies outside the village, is large; rows of graves covered with little hillocks of stones give the impression of not yet being old. Dahma has, apparently, been decimated by an epidemic. The neatly cultivated fields lie awaiting the rain. Two date-palms as well as some *nibq* trees increase the parched and barren impression of the place.

Apparently we are over the watershed here and in the river-basin of Ḥaḍramaut Proper. The landscape looks dryer and emptier of vegetation. The *euphorbia* bushes have neither fruit nor blossom, and the few grasses are dried up. After passing Dahma we saw an artificial pond, at present dry, made at the cost of much labour, which is intended to hold the water after rain.

Half an hour after sunset we reached Bureyyira, our quarters for the night, situated close by a small village.

7. AN EXCURSION TO THE RUINS OF THE PEOPLE OF ʿĀD.

There were great things on the programme for May 14th. We had often questioned our Bedouins about ruins and inscriptions, and they understood what we meant, for all of them knew about the remains of the towns and graves of the people of ʿĀd and Thamūd, the original inhabitants of the land, whom Allah had swept from the face of the earth, in punishment for their many sins. The groups of ruins are actually situated more towards Ḥaḍramaut Proper, with their centre in the direction of the Yemen. Probably we were setting foot here on the borderland of Sabaean civilisation. Old Aḥmad, one of our Sēbānī Bedouins, attracted by the promised reward, said that he had pondered well over it and remembered that there were inscriptions, painted by the people of ʿĀd, on a wall of rock in Wādī Thiqbe, not far to the north-east of our route, and that, besides

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

this, there were the remains of the houses which these people had inhabited in the days of the preaching of Hūd, the prophet of Allah. It was arranged for the caravan to go ahead as usual and for us to rise early and set out on a rapid excursion to the ᶜĀd remains, without losing a day of the time on our schedule.

The night in Bureyyira seemed very cold, yet in the morning the temperature was only 18° C. The night-wind and the great contrast with the heat of the day make one feel the cold very much. We set out at 5 o'clock under the leadership of Aḥmad and the protection of the soldier ᶜUbēd. We went first by the road on donkeys for some hours and then, leaving the animals with their attendants behind us, we struck into a side-path that led over massive rocks to the source of Wādī Ghār. The wādī is very soon deeply hollowed out and we climb with difficulty high up along its steep wall, but luckily that does not last long, and we approach the wādī-bed. Occasionally our way is blocked by great, greyish-white boulders. All sorts of interesting plants grow against the wall of rock as, for example, *anisotes*, which is also to be found at el-Ḥisī. We followed the bed of this narrow, deep wādī for a long time, and our eyes were refreshed by the colour of many an acacia. After strenuous climbing we reached the broader Wādī Thiqbe, where we had to circumvent immense blocks of rock. The *sēls* must have formed waterfalls here by which deep basins have been hollowed out of the rock, which in several places still held some water, though rather thick and brown. Now that the sun is so high that its rays reach the bed of the wādī, the temperature rises very quickly, and the prolonged and hard exertion makes us very thirsty. The water-supply that we brought with us is soon exhausted, but these basins of brown water arouse aversion. There is some shadow given by a number of trees, among which are some large *nibqs*, and that is the spot where we rest. Aḥmad really knows the way well. He brings us to a deep pool, hidden from sight by rocks, which has straight walls and is quite full of brown water. Though we dare not

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

825 drink it, we will, at least, swim in it! Our guide urgently advises against doing so: according to him, there are large snakes in the water. We do not see the dangerous reptiles and do not believe the story, but wish to treat with respect the superstitious awe with which the Bedouins have shown us this beautiful bit of nature, so we forego our bathe.

●172 Not far from this place there rises a high rocky precipice which, more than has been the case hitherto, makes the wādī like a real cañon. The people of ʿĀd must have had their dwellings up there, where the perpendicular part begins. Some climbing along the steep rock débris at the foot brings us into the Dār ʿĀd, the region of ʿĀd. We see, clinging to the base of the partly overhanging wall of rock, the remains of very simple dwellings about ten feet long by six feet high. Holes in the rock-wall are, in places, closed up with stones, but in others are open. They go fairly deep into the wall, but, on examination, have nothing remarkable to show. They attain a height of about one foot. One can see also a row of small holes where the rafters of the roof were supported. There are drawings in red paint in several places higher up on the wall of rock, which look like alphabetic characters, and some can be recognised as Sabaean. They are only in a state of preservation in such places where neither sun nor rain can touch them.

The copies which we made were deciphered by Professor Mordtmann of Berlin, who found that these inscriptions consisted exclusively of proper names.

The houses can be identified over a space of about 450 feet. The walls which still stand are made of natural stones bound together by means of mud; they do not look very old and can well be of later date than the drawings.

000 The Dār ʿĀd lies just at the junction of Wādī Menwe with Wādī Thiqbe. We continue our climbing along the rock-wall of the former to the noon halting place of our caravan, by the Murabbaʿa Bā Khemīs, where we arrive an hour after midday.

361

A part of Hadjarēn.

172●

Along the ruins of Ghēbūn, near el-Meshhed.

[facing p 80]

See pages 78 and 83.

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169 there. He knows as many as 150 men who have gone from
656 Hadjarēn to seek their fortunes in Java. The little town has now at most 3000 inhabitants. Before we leave, I have to look at the Dutch passports of our host and his relations, make a note of their adresses, and promise to look them up later on in Cheribon. They have fully earned any small attention from our side; we stand amazed over the simple, genuine kindness that we received in this house, especially after our sad experience in Ṣīf.

609 At our departure all sorts of Malay speaking Hadjarēners endeavour to exchange a few words with the white government official from their second fatherland. And, instead of being surrounded by faces with expressions of hate and contempt, and malicious, insulting remarks about *Naṣrānīs*, who should not be allowed to pollute the land, our exodus here is a small triumphal procession, crowded round as we are by the exuberant youth of the streets, all trying to air their knowledge of the Malay language.

4. ACROSS THE NEUTRAL ZONE BETWEEN EL-QEᶜĒṬĪ AND ĀL KATHĪR TERRITORY.

622 Guides of the el-ᶜAṭṭās clan have offered themselves to
●172 take us to el-Meshhed, the first place in the domain of the
131 Āl Kathīr, which is, however, actually under the supervision of the el-ᶜAṭṭās family. Our caravan divides, as Von Wissmann, with a couple of young sayyids, the Yāfiᶜ soldiers, one of our *ᶜabīd* (slave soldiers), and a whole band of street-arabs sets out to ascend Djebel Hadjarēn to see whether the ruins, of which we have been told, are really to be found, to take photographs and to survey. The territory of the Qeᶜēṭīs ends just beyond Hadjarēn. Further up, in the midst of Ḥaḍramaut Proper, there lie, like islands, the districts of Ḥōra and el-Qaṭn-Shibām, which are subject to the Qeᶜēṭī régime. The neutral zone, which we now enter, is an ideal hunting-ground for robbers and thieves.

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662 fine young men, who represent their father in the duties of host most admirably. The el-ᶜAṭṭās family has a big well-kept guest-house for relations passing through el-Meshhed. The roof-storey has been recently whitewashed, the mud staircases and passages, the bathroom, lavatories and everything are clean. It is a luxury for us to be able to have a bath and to put up our camp-beds on the clean, white roof-terrace, high up above the dirty smells, which pervade every Arab town. What a difference from the stable-roof at Ṣīf!

●172 212 On Tuesday, May 19th, we begin a detailed examination of the inscriptions at el-Meshhed and of the ruins of Ghēbūn, which are near by, to the south and south-west. We were shown stones with Sabaean inscriptions, built into houses, saints' graves, mosques, *siqāyas* and into the large, very deep village well. The material is not favourable; the limestone which is used is taken from the neighbouring mountains and is brittle, and, consequently, there remain only fragments of most of the inscriptions. A longer and more minute research than we could undertake would most certainly bring a great deal more to light. Ten minutes' walk out of el-Meshhed to the south-west lies the group of ruins of Ghēbūn. They are ascribed by the inhabitants to the fabulous people of the ᶜĀdites and are probably on the site of a Ḥimyaritic city. One sees hillocks as much as thirty feet in height, and on their tops the remains of walls built up of great, hewn blocks of stone, which have been bound with a sort of cement. On one of the first hills we see the remains of four stone foundations with square impressions, probably the bases of pillars. Towards the slopes we find many fragments of stone with characters inscribed on them. On the next hillock there is an old well, thirty feet in diameter and quite sixty feet deep. The upper part of its wall consists of a layer of piled-up stone, while the lower part is of mud. The well is partly filled with rubbish and was probably much deeper originally than it is now. The subsoil water-level here is quite 180 feet below the surface of the earth. Many fragments of simple pottery lie

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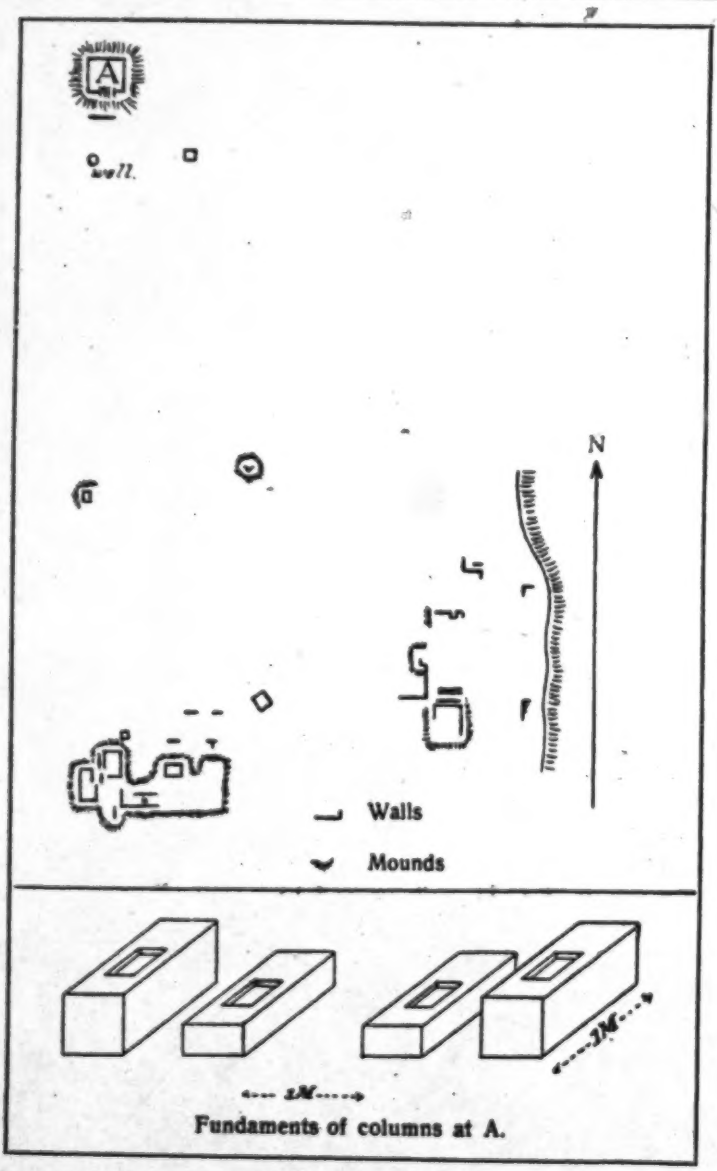
172



RUINS OF GHĒBŪN. NORTHERN BUILDINGS.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

amongst the broken stones of the ruins, also little bits of rough, dark glass.

A quarter of an hour's walk distant there is another group of ruins that they call here "the Graves of the Kings". All those who are following us out of curiosity drop behind, when we go on through the suffocating heat between sand- and loam hills on the way to the Graves of the Kings, which lie in a great square S. S. W. of el-Meshhed. We find few inscriptions here. The hills are separated from each other, and have on their tops the foundations of solid walls forming a thirty feet square enclosure. The stones are not very large and are well and smoothly hewn. The ruins here are generally covered with piles of loam, very possibly the remains of the mud upper parts of the buildings. Many red-brown fragments of pottery lie among the stones.

The assumption made by the Bents [1], that the ground has been raised more than thirty feet by drifting sand and that thus the old buildings are to a great extent buried, seems to be incorrect. The opposite supposition is more likely, namely, that the *sēl*-bed became more deeply washed away when the barrages and irrigation canals were no longer kept in repair. The ruins now all lie upon the hill-tops, the loess around them having been all washed away.

Sayyid Ḥasan el-ʿAṭṭās, the eldest brother now in Ḥaḍramaut of our companion Sayyid ʿAluwī and the energetic head of the family in Ḥurēḍa, came from el-Meshhed to meet us. The father in Batavia had sent telegraphic instructions to give a good reception to the first envoy of the Netherlands to Ḥaḍramaut. Directly he received news of our approach, Sayyid Ḥasan mounted a *ḥadjīn* (riding camel) and set out to meet us. Being in his own country he dared to wear the khaki sun-helmet of the *Efrendjīs*, when riding. Everything, later on, showed his progressiveness, his energy and daring. Sayyid Ḥasan acted henceforth as our host, and we had a good time under his guidance. Had he had enough time to accompany

[1] Bent, *op. cit.*, p. 104 *sq.*

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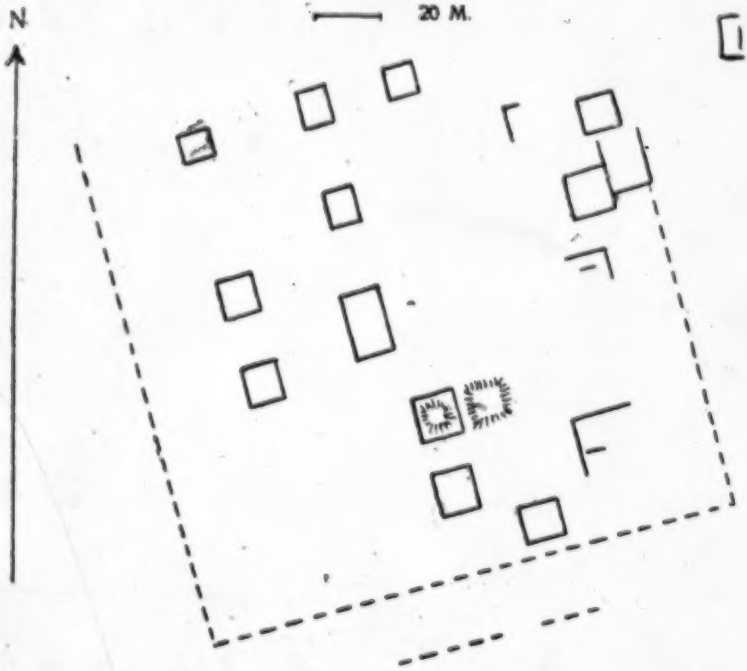
us on the return journey, many disappointments would most certainly have been spared us.

Our help had been asked for by several sick old women and men in el-Meshhed, and we now returned there. There is much surprise when we refuse to give medicine for a *sherīfa* (the daughter of a sayyid), because we are not allowed to see the patient.



Walls of hewn stone

Walls of unhewn stone

Clay mounds

RUINS OF GHĒBŪN. SOUTHERN BUILDINGS.

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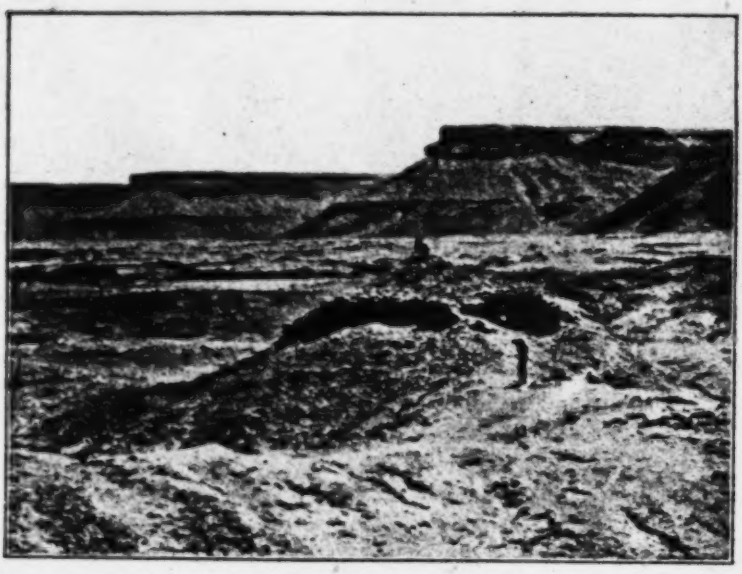

The "Graves of the Kings".

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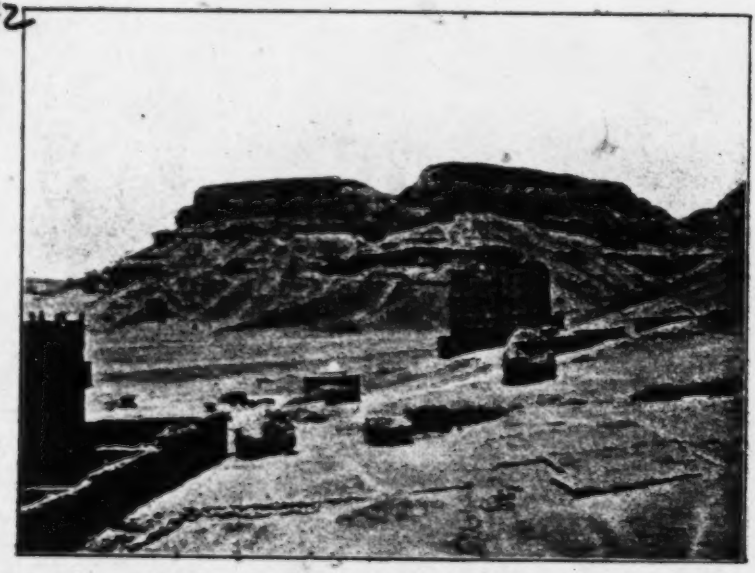

The el-ʿAṭṭās house in Ḥurēḍa.

p88 (B)

See pages 86 and 90.

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000 a chance of success some money could be spared for it. Close
●172 to this spring[1] lie against the mountain-wall the ruins of Khurēḍa, the town from which Ḥurēḍa is said to have taken its name. It may be presumed that these ruins date from well into pre-Islamic times, in spite of the fact that we found no inscriptions to prove it. There are remains of houses, namely foundations of stone, two wells, which are still very deep, and a cistern, which is plastered with a kind of cement. A fragment of an aqueduct of mason-work leading to the spring is still to be seen.

312 Tins of water are carried on donkeys from the spring to Ḥurēḍa. We advised that the spring and the rocky basin in front of it should be cleaned out right up to the massive rock, then cemented, and the water brought at least as far as the valley by means of a conduit of iron piping, thus saving much output of energy and minimizing the possibility of pollution and the spilling of water.

After this, under the guidance of the Bedouin Sayyid ʿAlī, we go through the palm-groves and over the dry irrigation canals to the other wall of the wādī, where, in a fissure of the rock, there is said to be a little pool which always has water. Sayyid ʿAlī does not much like the hot climbing, but we
529 persevere in it. After energetic scrambling over fields of stone and up slopes of rock we actually arrive at el-Baḥr, "the sea", a deep, rocky basin, full of water, with high, cavernous walls from which, after rain, the water must fall in spray into the basin. It is a splendid place for a swim. The temperature of the water is certainly high, but it is so broiling hot in the chasm that the contrast is refreshing. The basin is so deep that we cannot dive to the bottom. Sayyid ʿAlī performed one of his great feats, on the occasion of a picnic, by climbing up the high wall of rock and diving thence into the basin. That nearly all these men of the desert are good swimmers and daring divers certainly points to the natural giftedness of the race. Ḥaḍramīs who have never seen the sea enlist as pearl-divers or go as stokers on long voyages.

1 [ONE MILE S.W. of HUREDA -- ANALYST]

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312 (that is a little more than 300 feet). Groups of sturdy male and female slaves, singing in unison the while, raised the water-bags by a pulley and emptied the contents into a conduit which led to a cemented basin. Cheap labour on the one hand and capital earned abroad on the other make it possible to keep such places as Ḥurēḍa in condition. The palm-groves are kept alive by the *sēl*, but seem to be on the decline and, on their borders, to be giving way to accumulating heaps of sand.

648 On the evening of the 21st of May, I was officially received in the simple dwelling of the Governor of Ḥurēḍa. The Governor of el-Meshhed and Sayyid Ḥasan el-ᶜAṭṭās, however, acted as hosts and leaders of the meeting. The Governor is a quiet, friendly, young man and the whole atmosphere is particularly gentle and kind. A youthful poet of the el-ᶜAṭṭās family had composed a song of welcome. Sayyid Ḥasan makes a speech in which the poem is recited and in which he welcomes us as the first Europeans to visit Ḥurēḍa. As Dutch subjects, they are very much delighted that one of us is an envoy of the Netherlands Government. In my reply I said that it seemed right and fair to me that the Dutchman has preceded the Briton in Ḥurēḍa, for with the Dutch in Java exist the more long-standing and intimate relations. In Ḥaḍramaut, along with agreeable surprises, I also found disappointing conditions. We considered the energetic Ḥaḍramīs, whom we know in Java, to be capable of improving the backward conditions which exist in their fatherland.

I seized every opportunity that was offered to me to point to the necessity of independent activity and thus to answer the repeated requests for Dutch or other foreign help for the achieving of better conditions.

172 My companion, with the Bedouin Sayyid ᶜAlī el-ᶜAṭṭās, climbed Djebel Ghumdān to investigate the wonders that are told of this historic summit. There should be ruins, and a deep well on the top was said to have a subterranean connection with Bīr ᶜAlī on the coast. The ruins of defensive towers on

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the Ghumdān appear to be of recent date. The well is also found, and plucky Sayyid ʿAlī has the daring to go down into it, in spite of the gruesome tales of snakes and other monsters which are said to haunt its depths. The pit appears to be a shaft of karst about 90 feet in depth; in the lower part of it there is a transverse passage into which Sayyid ʿAlī penetrates over a few yards, with a loaded revolver in his hand. Then the squeaking of bats fluttering around him becomes too much for him and he returns to the shaft, where Von Wissmann has followed him. No traces of human activity nor of hidden treasures can be detected by the light of their electric torches. Both of them climb up again out of the pit without mishap, but with great effort.

Henceforth Sayyid ʿAlī feels drawn to Von Wissmann by the friendship of admiration. Of course he wishes to go with us into the valley of Ḥaḍramaut to the great Sayyid el-Kāf in Terīm and then to accompany us further to Qabr Hūd, there, with his friend "Ḥarmal" (corruption of Hermann, see p. 47), to explore the mysterious Bīr Barhūt. He who dared the descent of Bīr Ghumdān shall also venture the hell's mouth of Barhūt, and the name of Sayyid ʿAlī shall be handed down in honour for generations in the annals of Ḥaḍramaut. Drunken with pride and joy Sayyid ʿAlī accompanies Von Wissmann through the darkness back to Ḥurēḍa. He relates his tale, which grows ever finer in the telling, until deep into the night. My companion's fame precedes him into Ḥaḍramaut. Sayyid ʿAlī will introduce him with pride: "Ḥarmal, the German airman (look at his knee that has been shot away), the man who fears no height nor depth."

On the morning of May 22nd we have another invitation, this time to take tea with Sayyid Ṭālib, who is introduced as the Sindbad of Ḥaḍramaut. He has travelled pretty well all over the Islamic world, where as a sayyid and son of a race of theologians he was everywhere welcome, and he has returned wealthy from his travels. This Sindbad's beautiful house is jestingly called "the little Yildiz". He is old by now, but listens

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helped by the motor-car in his great work of pacifying and opening up Ḥaḍramaut.

We depart in two fine cars belonging to the Sultan of Sēwūn for Terîm, the city to which Leo Hirsch has preceded us and from which nearly forty years ago the sayyids with their fanaticism and hatred of Christianity forced him to flee within a few hours of his arrival. An Englishman, Mr. Boscawen, reached there also a full year in advance of us, but he did not publish a description of his journey and, according to report, only came for sport. Aeroplanes of the R. A. F. at Aden, with Colonels Cochrane and Lake and Flight-Lieutenant Rickards on board, also once flew high above the town, but they were only making an aerial reconnaissance, although the scouts themselves felt a growing desire within them to set foot for once in this wonderful town. The Ḥaḍramis say of it: "Terîm — and then thou desirest nothing else."

The cars take us through winding mud lanes between palm-groves to the hilly stretch of sand and loam outside the town. The palm-trees are planted well apart from each other in the sand; the fields of *dhura* come to an end but the little dykes of the area that can only be cultivated when the rains are sufficient are to be seen for long afterwards. Quite soon we pass the ruins of a town, Maryama, probably of great antiquity. The castle and the town were laid waste in a local war, and, of the cultivation of the land, only the little dykes, which divided the fields into squares, still remain. Close to Maryama there was an old road which crossed southwards over the mountain-wall. My companion climbed this *ʿaqaba* called Duqm el-Aswad and found on the rock-wall close to the *djōl* scrollings and grafitti probably made, many centuries ago, by the Bedouins of passing caravans. Some distance further on the villages and palm-groves at the foot of the southern mountain-wall come to an end. The loam vanishes under an ever thicker layer of sand and sand-dunes, and the cars stall several times. In accordance with the instructions of the Sultan we do not go by the normal way, through the plain, to Terîm, but follow

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

entrusted by his uncle Sayyid Abū Bakr with the carrying out of these aviation plans.

On the morning after our arrival we were, first of all, shown the so-called "wild cow" [1], a present to Sayyid Abū Bakr from some Bedouins who had caught it young on the border of the Rub' el-Khālī (the "Empty Quarter"). The wild cow appears to be a white antelope with black marks and two very long, straight horns. The beautiful, big creature has already lived in captivity for twelve years and looks well on it, except that its hoofs, owing to lack of abrasion, have grown too long.

On the ground floor of Sayyid Abū Bakr's house, where he has his stables, we found some stones with inscriptions on them, brought by Bedouins from the ruins of Sūne. This drew our attention towards that district of ruins, and our host promised that he would organize an excursion for us there.

3. THE PALACES OF TERĪM.

Later we pay a visit to Sayyid 'Umar bin Shēkh el-Kāf, the younger brother of our host, already mentioned, whose house, just restored, is said to be the most beautiful in all Terīm, and that is saying a great deal in this city of palaces. His house is chiefly conspicuous for its dimensions and colour. The outside is painted deep blue, and the stately rows of tall windows are bordered with a design in yellow. There is, also, no sparing use of pink and green. The style is more Indian than Ḥaḍramī.

All the great houses of Terīm have a character quite of their own that one does not see in the other towns of Ḥaḍramaut. They are massive, square buildings, with regular rows of tall windows, with few extensions on the roofs and few decorative designs on the top of the walls or on the parapets. The lower floor, which is very lofty, has generally two wide, high entrances, closed by doors of teak, and with broad

[1] *Baqarat el-waḥsh* (بقرة الوحش).

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on a hill. Whilst we photograph, survey and sketch, we feel as if our narrow standing-place were swaying gently to and fro. It is unpleasant to contemplate that we are so high above the level of the ground, standing on a slender tower made of almost nothing but dried mud.

5. SMALL RUINS OUTSIDE TERĪM.

In the evening, during the family motor drive, when the el-Kāfs and their set ride in slow procession through the gardens of Terīm and the baked plains of stone that lie outside it, a hill in the midst of Wādī ᶜĒdīd is pointed out to us, which is said to have associations dating from the ᶜĀd epoch. From a certain distance an old, paved high road is clearly visible, leading to the summit of the hill, where a temple must have stood. Only loose stones with mortar between them are now to be seen on the hill; at its base there are the remains of foundations of buildings, which seem to point to a guest-house with many small rooms. For the people of Terīm these ruins have an odour of sanctity; a similar hill, close by, is used by childless women as a place of worship, where they have to perform certain nocturnal rites by means of which they hope to have children.

6. A WALK THROUGH THE TOWN.

On the following day, May 28th, we go with the doctor to see his house and clinic. This pioneer of western medical science has no easy time here; the people still cling to their own ideas as to the functions of the human body and the causes of illness. They think that there are three chief causes of sickness, namely *riyāḥ* (gasses in the blood), *burūda* (cold), and *ḥarāra* (heat). They say of foods that they make the body cold or hot, or cause or disperse flatulence. Even the men of standing talk about their ailments in this terminology

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Ruined remains of a stone-built dam from pre-Islamic days, near Sūne.

Some of the ruin mounds near Sūne.

facing p. 144

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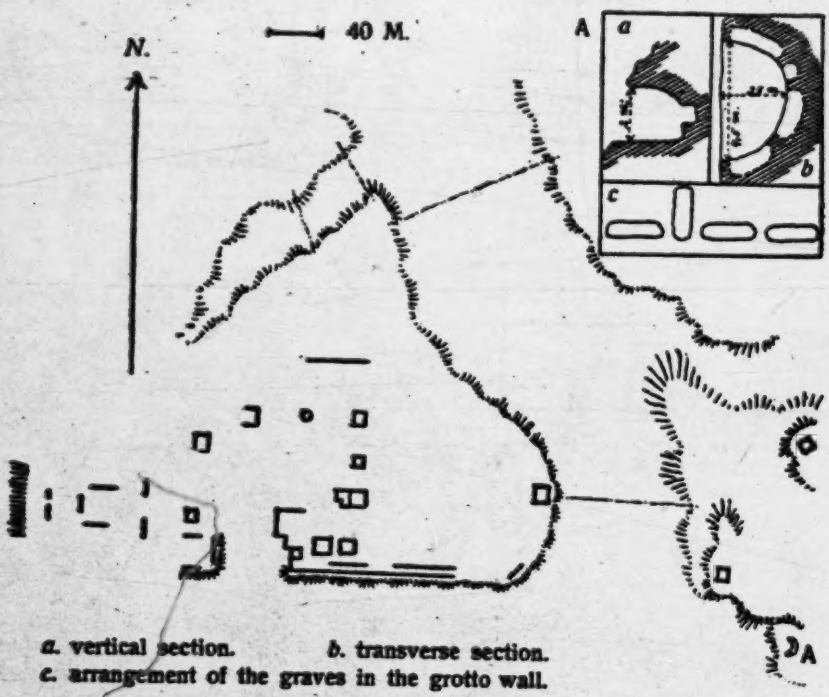
We succeed in getting the cars close to the site of the ruins at Ḥedbet el-Ghuṣn, near the village of Sūne. Shortly before arriving there we passed a massive piece of wall made of natural stone and certainly joined to the rock-wall in former



a. vertical section. *b.* transverse section.
c. arrangement of the graves in the grotto wall.

SKETCH OF RUINS AT ḤEDBET EL-GHUSN NEAR SŪNE.

times. It is presumably the remains of a dam built across the wādī, dating from pre-Islamic times.

The ruins near Sūne have much in common with those of Ghēbūn. The square foundations of buildings, made of huge pieces of uncut stone, are still to be seen on the tops of mounds. Lying on top of and around the ruins are smaller stones, being the remains of a kind of mortar, and many

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

potsherds. We find but few inscriptions and then only in fragments. Von Wissmann wriggled with difficulty into a grotto in the mountain-wall and there found five empty sepulchral niches. It is unbearably hot and none of our company helps us in our investigations. The sun forces us to retreat after we have first taken some photographs and made some sketches.

The return journey is laboriously accomplished, again the cars stall repeatedly in the scorching sand of the wādīs and the body of the car is so hot that one burns oneself when touching it to push. Back at Ruḍēḥ, we seek shelter from the sun's heat in the house of Sayyid el-ʿĒderūs, where the midday meal is awaiting us. Long negotiations have been necessary to achieve this arrangement, for up to a short time ago he was at war with the adherents of Sayyid Abū Bakr. The occasion of our visit is used as a first, cautious attempt at friendship, following on the conclusion of peace a year ago. Ruḍēḥ is a village falling into decline, in a landscape drying up through lack of workers for its irrigation.

Back at Terīm we make a detailed report to our much interested host. The fragments with inscriptions found by us are handed over to him with the request that he will add them to the other pieces from Sūne that are already in his possession. We strongly advise the founding of a museum at Terīm, where antiquities could be preserved; this would prevent their being used in building wells and houses and being made unrecognizable by a layer of plaster, or their being disposed of outside the country.

Preparations have been completed meanwhile for the trip to Qabr Hūd and Bīr Barhūt and we can leave on the second day. It is urgent now to make fixed plans for our return journey as that also will require time to arrange. The route Terīm—esh-Shiḥr is open to us; notwithstanding the bad reports concerning this route current in the Qeʿēṭī territory, Sayyid Abū Bakr takes full responsibility for our safety, should we wish to travel that way. For me personally this is

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

To expedite matters we take the risk of starting off in advance on our donkeys. As we pass we see at a great distance some villages almost entirely in ruins, and also castles of the type of that of Qasam. There is water here and there in the deep and by no means wide *sēl*-bed. It appeared soon after we left ʿĒnāt and it increased further towards the east. This water is pretty bitter, though in some places it is sweet enough to be drinkable. The inhabitants prefer the well-water, which is better, but the pack-animals drink the water of the river. It is running and every now and then disappears to continue its course underground. Beyond Qasam the wādī is still wide and the soil consists of a thick layer of loess. The broad path winds between bushes of fresh green *rāk* covered with bluish-red berries, which are being gathered here and there by children. When we heard that they were eatable we tasted them; they have the taste of cress, sweet but hot as pepper. They have a strong laxative action as have the leaves for which camels and donkeys have a liking. Where *rāk* grows the animals are given nothing else, although they get diarrhoea from it. In journeying through *rāk* districts one sees the rumps of the camels smeared with greenish pap, whilst their leaders and riders are not free from splashes sprinkled round by their animals' tails. At these times a very unpleasant smell clings night and day to the caravan.

The further we go, the more barren becomes the bed of the wādī, which is still very wide. The layer of loam is covered with sand; mounds of loam rise up out of it, some of them covered with vegetation. Shortly before sunset we enter a region of many and magnificent ruins. It is too late to examine them closely, and we pass the smaller mounds by so as to go on to the central ruin of el-ʿUrr. This is visible when we are still far from it. Massive remains of walls, towering high against the evening sky, stand on a lonely mass of rock, right in the midst of the wādī level. The rocky hill extends some distance and is very steep, and it is difficult to clamber over the rubble of the building, which has

172

The ruins of Ḥuṣn el-'Urr seen from the North-west.

facing p 152

See page 152.

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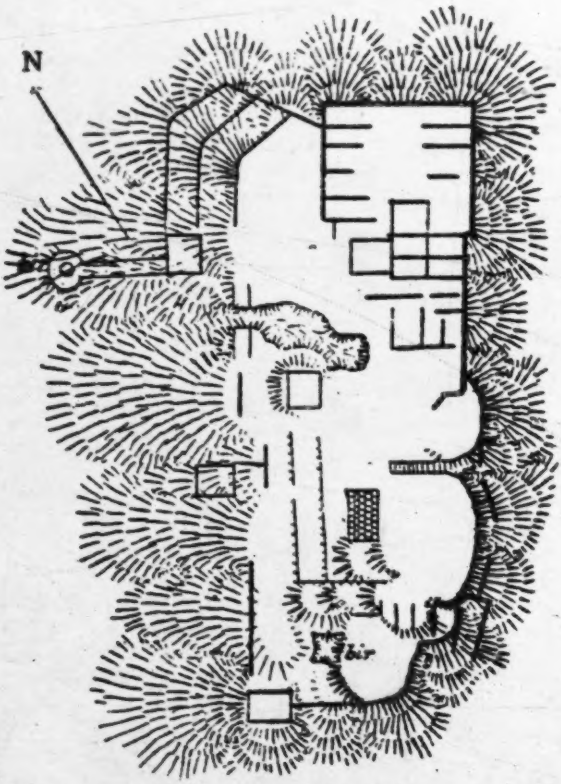
The ruins of Ḥuṣn el-'Urr seen from the South-east.

facing p.153

See page 153.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

fallen down it. This site justifies the conclusion that we have here a fortress which once commanded the surrounding country. At the foot is a well of mason-work, now partly filled up with débris. Traces of a path leading from the well to the



RUINS OF HUSN EL-'URR. 1:1000

summit are still discernable. Remains of the buildings are strewn around and on top of the hill. Strong, high walls have been erected of well-hewn stone, and remnants of them still stand to a height of from 45 to 50 feet. There is a steep, narrow passage in the middle of the south-eastern side of the rock,

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

172 where the vestiges of steps are still to be seen: this must have been the principal entrance to the castle. We were not successful in finding inscriptions of any importance, but we did discover some carved capitals of pillars. These we buried in the sand with the object of picking them up on our return journey when we hoped to have time for a more leisurely examination of the ruins of this imposing castle.

4. A NIGHT IN ES-SŌM.

For the moment the setting sun forced us to go on further to es-Sōm, where we intended to spend the night. The last and most tiring hours of travel were made even more wearisome by a hot sand-storm, which delayed us so long that darkness had set in several hours before we reached the sūl-bed in which, at this spot, there is a wide, shallow strip of water. The donkeys and camels have found their way in the darkness and now get through the tepid water without difficulty, but my donkey refuses to budge an inch. The caravan vanishes into the darkness of the night; I hear it, far away, climbing up the bank of the wādī, and then all is still. Weary with beating my unwilling beast, I sit down waiting to see whether the others will miss me and send help. It is not long before three men with electric torches come back for me. Our united efforts push the donkey into the water and, once in it, he puts his best foot foremost to reach the other side. We follow barefoot to where the caravan awaits us. No one, however, takes any notice of us; they are all standing in a crowd round my cook, Ṣāliḥ, who has trodden on a scorpion and been stung by the insect. He is groaning with pain. We can do nothing for him here, but must endeavour to get to es-Sōm as quickly as possible.

This small, dying place makes a poverty-stricken, gloomy impression; we stumble, tired and disheartened, through the winding streets; the only sound is Ṣāliḥ's groaning. Will they be ready, in this miserable village, to take us in immediately

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

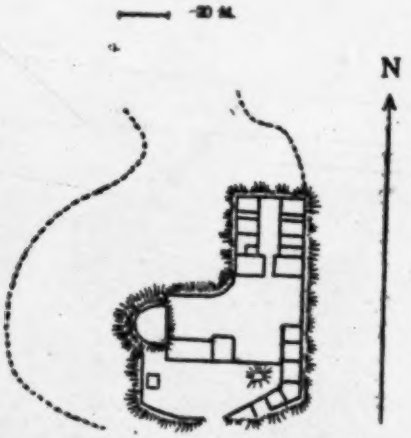
is always water in the *sēl*-bed, *rāk* bushes and tamarisks grow in plenty. We soon pass the wide delta of the "Seven Wādīs" which debouch into the main wādī.

After two and a half hours steady walking we arrive in pitch darkness at Fughma and knock at the door of the house where, on our outward journey, we have spent some hours during the heat of the day. Although the master of the house has already retired with his family for the night's rest on the roof, he comes at once to open the door to us, and we also are assigned a part of a roof, a coverlet of goat's hair and a few greasy cushions. When everyone has settled down again to rest our caravan looms up out of the darkness, and the men, in their turn, are received with great hospitality and given quarters on another roof.

On the following day, June 3rd, we leave Fughma by break of day and, before it becomes very hot, reach es-Sōm, where we again call on our host of the journey out. We are received with particular friendliness and are all allowed into the great reception-room, the *madjlis*. We want to write and rest, and we put out feelers to see whether there is, perhaps, a separate, small room for us; the living-room is immediately emptied and placed at our disposal. We wish to leave early in the afternoon to see the groups of ruins at el-Mekēnūn, Thōbe and el-ᶜUrr before sundown.

The group of ruins known as el-Mekēnūn lies near es-Sōm and towards the northern wall of the wādī. The remains of old buildings stand out above the plain like mounds of débris, with a well now partly filled in with stones, lying between them. Our search for stones with inscriptions is *not* rewarded. Connected with these mounds there is a large open space that is regarded as a cemetery by the people of the district; stones have been placed in circles and ellipses and are said to indicate the graves. According to tradition, the people of ᶜĀd were a race of giants and the dimensions of these circles and ellipses do not clash with this conception. We have no time to excavate; there are more groups of ruins to inspect. Against

172 our will we turn our backs on el-Mekēnūn and follow our guide into Wādī Sekhōre. In the distance we can already see, rising upon a precipitous, high hill, the remains of what must once have been a fortress. The position points to this and has much in common with that of the ruins of the castle at el-ʿUrr, which stand on a similar hill rising out of the main wādī, only half an hour's walk westwards.



RUINS OF EL-MEKĒNŪN.

Ḥuṣn Thōbe is the name of the ruined castle at the mouth of Wādī Sekhōre. The steep slopes of the huge rock, which is nearly 300 feet high, are covered with débris. At its foot there is a well, at the top we find fairly high remains of walls, but no inscriptions.

174 The scarcity of inscriptions found here, in contrast with the multiplicity of those found in the mountainous land of the Yemen, is explicable if we look upon Ḥaḍramaut as the borderland of the Sabaean and Minaean Kingdoms. Professor J. H. Mordtmann of Berlin, who studied and deciphered the inscriptions that we brought home, is of opinion that the people of

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

been the borderland of two kingdoms, which naturally would not be the most favourable place for setting up inscriptions. Frontier defences are never centres of culture. Furthermore the stone here is not favourable for incising: it is too brittle. All the texts deciphered for us by Mordtmann are votary inscriptions (proskynemas) to the national god, Sīn.

From Ḥuṣn Thōbe we walked back to the main wādī, in whose midst, on a great lonely rock, remains of the walls of Ḥuṣn el-ʿUrr still rise to a considerable height. We met the caravan here and, uniting our forces, tried to get at a piece of cut stone that was cemented into the upper part of the remains of the walls. After much effort we succeeded. It turned out that we had detached a capital of whitish sandstone, particularly well-hewn on its four planes. The capital was too heavy for transport on our camels, so Von Wissmann made the drawing reproduced here.[1] The skill of the artist who, in ancient times, made this head of a column is clearly shown in the undamaged portions. The sculptor seems to have depicted hunting scenes. Mounted men fighting with lions are represented on one plane; on another are very good reproductions of the ibex (*wiʿl*), an animal which plays a great part in the folklore of Ḥaḍramaut. The *wiʿl* hunt is still the favourite sport of the Ḥaḍramīs, although strongly disapproved of by their religious leaders on account of the ceremonies of evidently heathen origin accompanying it. The heavy, notched horns of the ibex, gracefully bending backwards, are, up to this day, to be found as trophies decorating the façade of many a house in Ḥaḍramaut.

The smaller hewn stone that we had found in the ruins on the outward journey was dug up again. This stone, flat and of the same white sandstone as the capital, appeared to bear on front and back an identical sculpture, representing a bunch of grapes with a few leaves, a motive that also occurs here and there on the decorated surfaces of the capital. We wished to take this stone with us to Terīm as an addition

[1] See p. 178.

p.178

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24:Meulen and Wissmann T-9 (1931)1932 MM2 Hadhramaut MM2

THE CARVED CAPITAL OF ḤUṢN EL-ʿURR.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

361 778 788 the tombs of holy men. The Āl el-ᶜĒderūs, one of the families of sayyids whose riches are made in Java, come from ᶜĒnāt and are, moreover, the ruling family in this pious city, which owes the few houses that are kept in repair, the beautiful white mosques and the fine school for boys to these sayyids and to those of the Āl Ḥāmid. At the seven *qubbas* we meet Sayyid ᶜAlī bin el-ᶜĒderūs, who feels an exile from his people who live in Surabaya, but his place here will be taken by another member of the family in a few years' time. He is glad to meet someone who knows Java and invites us to take a cup of tea with him. We learn from him that ᶜĒnāt can 312 boast of thirteen mosques and has, at the present time, ● 172 5000 inhabitants. Water for drinking has to be brought from [145] a great distance, as the local supply is not fit for it. Sayyid ᶜAbdallāh Āl Ḥāmid, who lived for ten years in Dār es-Salām, is also glad to have an opportunity of talking once more with Europeans and comes to Sayyid ᶜAlī's *madjlis*. He has some acquaintance with the early history of his country and tells us of the great dam which is said to have existed in pre-Islamic times between Qabr Hūd and the sea. The destruction of this dam ushered in the decline of Ḥaḍramaut. Sayyid ᶜAbdallāh has his own theory of the means by which the great stones of the buildings in the pre-Islamic period were piled one upon the other; he asserts that he has seen representations of elephants on the ruins and assumes that it was by them that these heavy stones were dragged to their places. I doubt whether this supposition is correct, although it is true that elephants play a part in the historical traditions of Arabia. The great castles are built on high, rocky hills, whose slopes are barely practicable even for man.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

000 bands of white and grey, against the dark green of the palms. The soldiers and children of the garrison stood crowded together to enjoy to the last this short variation in the monotony of their life as a besieged people. Then, through plantations of young palms and, after that, over uncultivated stretches of sand, our way led to that last outpost of el-Qeᶜēṭī in Ḥaḍramaut, Shibām. As had been arranged, we announced our arrival directly to our friends Āl Ṭuwēy and Laᶜdjam at their garden home. Once again we stay in this Arabian Nights' palace, bathe in the clear, lukewarm swimming-pool, and enjoy the luxury offered us here by our hospitable friends.

Early on the following day we go to Shibām to take photographs of Ḥimyaritic inscriptions and sculptures, which are to be found in the shop of a local dealer in antiquities. It is already unbearably hot in the narrow lanes between the tall houses, where, moreover, market is being held. We are thankful to turn our backs on this unhygienic but wonderful New York of Ḥaḍramaut and to go by car to the Sultan's palace in el-Qaṭn.

609 Sultan ᶜAlī bin Ṣalāḥ bin Muḥammad bin ᶜUmar bin ᶜAwaḍ
● 172 bin ᶜAbdallāh el-Qeᶜēṭī gives us a hearty reception. He places an escort at Von Wissmann's disposal to show him some rock inscriptions and ruins on the southern bank of the wādī. It is very hot and the rocks are steep and high; the guides' interest in this inexplicable hobby of the Christians is extremely small, and Von Wissmann returns rather disappointed with the results of his excursion. We then go together in the Sultan's car to ᶜUqrān, a village about half-way back to Shibām, at the entrance to the short side-wādī of the name, 114 in the southern wall of the main wādī. Hirsch[1] and the 172 Bents[2] have been here. Hirsch gives a detailed description from which it would seem that there was more to be

[1] L. Hirsch, *op. cit.*, p. 191, 192.

[2] Th. and Mrs. Bent, *op. cit.*, p. 124 and 135. They call it Al Agran and Al Gran.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

seen at that time than there is now. The people inform us that the late Sultan had a stone, bearing an inscription, removed from the *masdjid* into which it was built and that he presented it to one of the *Efrendjīs*.[1] There are still a few mounds of ruins to be seen in ᶜUqrān and, further, several of the simple mud houses of the place are built on foundations dating from pre-Islamic times. Walls and evenly made stairs leading to the inhabited storeys of the houses have been put together of stones, excellently hewn and bound with a kind of mortar unknown at the present time.

After having had our meal with the Sultan at el-Qaṭn we go on in two cars to Hēnin. Vegetation ceases near el-Furṭ, then we drive for a short time over the layer of loess, but after that the drift-sand gets the upper hand. Sand-storms always arise in the afternoon in this region; they are caused by the sand becoming greatly heated and by the rise of columns of hot air. Before long we were absorbed into a burning shroud of sand and were fighting our lonely way onwards. Occasionally a bit of the rock-wall can be seen through the mist, and that has to suffice for the drivers to take their bearings by. After some groping and going astray we really do arrive at Hēnin. One of the cars has motor trouble and, after vain attempts to repair it, has to be left behind. Our friend Bin Martaᶜ is unfortunately away and his car with him. Wādī Ḥaḍramaut begins here and is six miles wide, but still we venture the crossing in one overburdened car from Hēnin on the north bank to el-Qaᶜūẓa on the south side, at the point where Wādī Rakhīya, Wādī 'l-Kasr and Wādī ᶜAmd unite and form the great Ḥaḍramaut Valley. Then we drive on over the clay layer and then again over drift-sand, going as fast as possible so as to avoid stalling. The high promontory of rock behind el-Qaᶜūẓa is a good landmark.

Shortly before sunset we emerge out of the fog of sand just in front of the closed gates of the castle, to the speechless

[1] This *Efrendjī* was Mr. Bent, who reproduces the stone opposite p. 145 of his book.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

At midday we reached Ḥurēḍa, where, unfortunately, we had to change camels. This generally takes up more than a day, but our el-ʿAṭṭās friends knew how to get things done for us more quickly, and by that same afternoon of June 9th we were on our way again into Wādī ʿAmd.

Sayyid ʿAluwī el-ʿAṭṭās, who had been our companion since Makalla, remained behind here. On long, wearying journeys one becomes intimately acquainted with the weak spots in one another's characters and so learns to value the good points all the more. Sayyid ʿAluwī had been a patient, good-humoured comrade to us two restless Westerners, with our endless questions and desire to investigate. By his introduction the houses and hearts of Ḥurēḍa were opened to us and Ḥurēḍa had been the key to Ḥaḍramaut for us. Our thankful recollections of that country can be summed up in the names el-ʿAṭṭās and el-Kāf.

2. POOR AND DRY—BUT RICH IN RUINS.

We stroll through Ḥurēḍa, attended by a goodly retinue, and not till we are outside the town do we mount our camels and say farewell. Von Wrede is the only European who claims to have travelled through Wādī ʿAmd, but it is a claim that we must call in question. Anyone who will go to the trouble of comparing Von Wrede's geographical descriptions of Wādī ʿAmd with Von Wissmann's map appended to the present work will probably experience the same feelings of doubt regarding that part of Von Wrede's accounts of his travels.

Just after leaving Ḥurēḍa we passed the largest area of ruins that we saw in Ḥaḍramaut. The mounds extend for a distance of about two and a half miles. A great quantity of small stones from the *sēl*-bed were at hand on the spot for building purposes, and this is, doubtless, the reason why so small a remnant of the walls still stands and why no inscriptions were found. Further up the wādī we constantly passed groups of ruins mostly crowning the hills lying in front of the mountain-wall.

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

621 We had not received favourable reports of Wādī ʿAmd. The el-Aṭṭās family, nevertheless, maintained the contrary; it is their wādī and the Djaʿdī Bedouins who inhabit it are allied with them and are, in a certain sense, under their control, but it is hard to discover how far this control goes. We got the impression that the wādī was very much armed and ready for war. The landscape is barren and, at first, monotonous; the *sēl*-bed is broad and filled with bluish-white, small boulders. Conditions must have been much better in the old days, for the numerous ruins suggest a dense population.

361 231 243 It is long after sunset before we reach Nukhr, where the el-ʿAṭṭās family own a house. The place consists of a few huts and a half tumble-down mud house, in which a room has been prepared for us. It is too warm to spend the night indoors, but the staircase leading to the roof has collapsed. In the middle of the hamlet there is a storehouse for fodder, half below and half above the ground. Its roof is about three feet above the ground and has a parapet about one and a half feet high. The basin thus formed is smoothly plastered with mud, and the grain is thrashed in it after harvesting. It makes a hard but safe sleeping place.

172 312 241 On the following day, June 10th, we set off again southwestwards. At first the wādī is very monotonous and barren and the *sēl*-bed widens considerably. After two hours' riding Wādī ʿAmd makes a bend towards the south and then very soon one comes across date plantations. There are an increasing number of ruins of what, presumably, were defence works, situated on hill-tops. The palm plantations have suffered much from the drought in recent years, as for two years there was neither rain nor *sēl* of any considerable quantity. The subsoil water is far from the surface and wells are 300 to 450 feet in depth so that they are not used for purposes of irrigation but only for supplying drinking-water. Groups of men hoist up the water, singing monotonously the while.

241 312 Further southwards the plantations increase and form an unbroken girdle between the broad, wild *sēl*-bed and the wes-

24:Meulen and Wissmann T-3 (1931)1932 MM2 Hadhramaut MM2

always has to be on one's guard against treachery. In answer to my question whether he likes being here, he replies that he does not. Separated as he is from wife and children in Java, he is only here to defend his family's honour and position, and as soon as he can be spared he will return to his mother-land.

The master of the house himself conducts us to a place where Ḥimyaritic characters have been scratched on a rock and where are also as many as five long, though fairly narrow, basins beside the path. They were, of course, dry for the time being, but appear to be quite serviceable, and were plastered on the inside with a kind of mortar.

4. THE TOWN OF ʿAMD, DIFFICULT DISCUSSIONS AND HARD DECEPTIONS.

The way continues for the greater part over the boulders in the *sēl*-bed, which evoke many a groan from our camels. The beasts are weary from the long march in the hot wādī, yet we are ready to stake everything on the attempt to reach ʿAmd before the day ends so that, in the evening, negotiations for our further journey may be started, and then perhaps we may have the luck to get off again after no more than a day's delay. To our pleasant surprise, the great man of Wādī ʿAmd, Shēkh ʿAwaḍ bin Saʿūd bin Shamlān el-Djaʿdī, overtakes us on our way. He is a tough greybeard, who is still lithe enough to mount onto his camel's back while it is standing. His greeting is friendly and he insists on my mounting his camel. The Shēkh's right hand, Sālim bin Sallūm el-Djaʿdī, a very loquacious man with a heart-rending voice, sits behind me. We go on at a trot. As we approach ʿAmd the date plantations grow thicker. It is already dark when we pass the big village of Ḥebeb. Our caravan has got somewhat separated through my riding-companion's insistence on keeping our racing camel perpetually at the trot. I am carried along helplessly and in the darkness it is quite an art to keep my seat

1950			
British	2,428	10,890,157	A 505
French	118	550,895	
Italian	268	785,461	
American	69	306,707	
Others	1,400	5,451,664	
	4,283	17,984,884	

Port facilities are described on pages 54–5.

Chapter 12: Archæology

H 172 [114]

An expedition sponsored by the American Foundation for the study of Man carried out archaeological excavations in March and April, 1950, in the territory of the Sharif of Beihan in the Western Aden Protectorate. The expedition was under the leadership of Mr. Wendell Phillips and the archaeological work was directed by Professor W. F. Albright of the Johns Hopkins University, Baltimore.

The main excavation took place on the mound of Hagr Kohlan at the northern end of Wadi Beihan. This site has been known by hearsay to scholars for a number of years and is identified by inscriptions with the ancient city of Timna or Thamna mentioned by classical geographers as the capital of the kingdom of Katabania or Qataban. It had not, however, been previously examined by an archaeological party.

A survey showed that the city within the walls, apart from suburbs and cemeteries, covered an area of some 70 acres. Traces of large buildings of very heavy stone construction were visible on the surface.

Excavations at the south gate and in an adjoining street showed that the city was defended in that part by a stone wall and a sloping stone revetment. The gate towers were of very heavy, but rough, construction and were marked by a large number of inscriptions, some of them texts of considerable length. These inscriptions were of different dates and the series probably covered several centuries. In the street some of the buildings were preserved to an average height of over ten feet above the street level. The city had been destroyed by a general conflagration probably in the first half of the first century B.C.

A small number of fragments of pottery of Mediterranean origin were found among the ruins. The most striking find was a pair of hollow cast bronze lions, ridden by cupids. The figures, which were some 30 inches in length and had originally been fixed to the exterior wall of a building, were Hellenistic in style but made, as was shown by inscriptions on the bases, in Southern Arabia.

A very considerable number of inscriptions were found in the excavations and elsewhere, including some graffiti in a very primitive form of the South Arabian alphabetic script.

7: Gt. Brit., Colonial Office G-3 (1949-50) 1951 MM1 Aden MM1
Hadhramaut MM2

H 172

A subsidiary excavation was carried out on the smaller mound of Hagr Bin Humeid, nine miles south of Timna, for the purpose of establishing a pottery sequence.

The objects found were divided between the expedition and the Amir of Beihan, and the latter's share will be exhibited in the Aden Museum on loan in due course.

The expedition returned for a further season's work in December, 1950.

H 172-113

A brief account of the first season's work has been published by Prof. W. F. Albright under the title of "The Chronology of Ancient South Arabia in the Light of the First Campaign of Excavation in Qataban" in the *Bulletin of the American Schools of Oriental Research*, No. 119.

Chapter 13: The British Council

A 648

In spite of the fact that the number of United Kingdom appointed staff has been cut from three to one, the work of the British Institute, both men's and women's branches, has continued, and membership has increased to over 400 men and over 200 women. Lectures have been given on a variety of subjects, and the sporting and social activities of the Institute have been developed. Affiliated societies have included the Aden Discussion Group and the Aden Arts Club.

The British Council Library, which contains over 7,000 volumes, has retained its popularity. A scheme for providing boxes of books to readers living outside the range of the main library has been inaugurated. A large number of periodicals have been made available.

Extra-mural activities have been carried on in various parts of the Colony. As it is not easy for those who live outside Crater to attend British Institute functions, lectures have been given, films shown, and discussions held about life in Britain on the premises of local societies and clubs of non-political character. Unfortunately, owing to the shortage of staff, it has not been possible to extend this service as much as had been hoped.

With the object of enabling the ordinary citizens of Aden to meet their counterparts in Britain, an electrician, a fisherman, an Assistant Political Officer, a printer, and a telephone engineer visited Britain during 1949 and 1950 on British Council bursaries.